



**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES  
LARGE AIRCRAFT**

**BIWEEKLY 2000-08**

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## LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
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Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; + - See AD for additional information.

### Biweekly 2000-01

99-27-01		Pratt & Whitney	Engine: JT8D-209, -217, -217A, -217C, and -219
99-27-03		Fokker	F27 Mark 050 Series
99-27-04		Rolls-Royce	Engine: Dart 506, 510, 511, 514, 525, 526, 529, 530, +
99-27-05		Boeing	767-200, -300, and -300F Series
99-27-06		Boeing	757-200, -200PF, and -200CB Series
99-27-07	S 98-25-53	Airbus	A300 B4-600R and A300 F4-600R Series
99-27-08		SAAB	SAAB SF340A and SAAB 340B Series
99-27-09		Airbus	A300 B4-203 Series
99-27-10		Airbus	A310 and A300-600 Series
99-27-11		British Aerospace	BAC 1-11 200 and 400 Series
99-27-13		Fokker	F27 Mark 050 Series
99-27-14	S 99-01-15	Airbus	A340-211, -212-, -213, -311, -312, and -313 Series
99-27-15		General Electric	Engine: GE90-76B, -77B, -85B, -90B, and -92B
99-27-16		CFE	Engine: CFE738-1-1B
2000-01-51	E	Bombardier	CL-600-2B16 (CL-604)

### Biweekly 2000-02

98-19-15 R1	R 98-19-15	Fairchild	SA226-T, SA226-T(B), SA226-AT, SA226-TC +
99-26-21		Boeing	737-300, -400, -500, -600, -700, and -800 Series
2000-01-01		Airbus	A300 B2-1A, B2-1C, B2-203, B2K-3C, B4-103, B4-2C +
2000-01-02		Raytheon	BAe.125 Series 1000A and 1000B and Hawker 1000 Series
2000-01-03		SAAB	SAAB 2000 Series
2000-01-04		SAAB	SAAB 2000 Series
2000-01-07		Bombardier	DHC-8-100, -200, and -300 Series
2000-01-08		British Aerospace	ATP
2000-01-09		General Electric	Engine: CJ610 Series and CF700 Series
2000-01-12	S 97-14-11	Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-01-13	S 99-08-12	Pratt & Whitney	Engine: JT9D-7, -7A, -7H, -7AH, -7F, -7J, -20, -20J +
2000-01-14		Boeing	777 Series
2000-01-15		Fokker	F27 Mark 050 Series
2000-01-17		McDonnell Douglas	MD-90 Series
2000-01-18		McDonnell Douglas	DC-8 Series
2000-01-51		Bombardier	CL-604 variant of Canadair Model CL-600-2B16 Series
2000-02-01		McDonnell Douglas	DC-8 Series
2000-02-02		Short Brothers	SD3-60 SHERPA, SD3-SHERPA Series and SD3-30 Series
2000-02-03		Boeing	737-300, -400, and -500 Series
2000-02-04		Airbus	A300 Series, A300-600, and A310 Series
2000-02-13		Bombardier	DHC-8-100, -200, and -300 Series

### Biweekly 2000-03

99-26-03	COR	McDonnell Douglas	MD-11 Series
2000-02-05	S 98-24-01	British Aerospace	Jetstream 4101
2000-02-06		Bombardier	DHC-8-100, -200, and -300 Series
2000-02-07		Bombardier	DHC-7-100 Series
2000-02-08		Dornier	328-100 Series
2000-02-10		Boeing	747 Series
2000-02-11		Boeing	777-200 Series
2000-02-15		Raytheon	65-90, 65-A90, B90, and C90
2000-02-17		Rolls-Royce	Engine: RB211 Trent 768-60, 772-60, and 772B-60 Series
2000-02-18	S 97-09-14	Boeing	737-100, -200, -300, -400, and -500 Series

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<b>Biweekly 2000-03...Cont'd</b>			
2000-02-19	S 90-02-16	Boeing	727 Series
2000-02-20	S 95-13-12 R1	Boeing	767 Series
2000-02-21		British Aerospace	Jetstream 4101
2000-02-22		Boeing	747-400 Series
2000-02-23		McDonnell Douglas	DC-9-10, -20, -30, -40, and -50 Series and DC-9-81, +
2000-02-24		Airbus	A300, A310, and A300-600 Series
2000-02-33		Boeing	747-400 Series
2000-02-34		Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-02-35		Raytheon	DH.125, HS.125, BH.125 Series 1A, 1B, 3A, 400A, +
2000-02-36	S 98-20-10	Airbus	A319, A320, and A321 Series
2000-02-37		Boeing	747 Series
2000-02-38	S 91-20-07	Airbus	A300, A300-600, and A310 Series
2000-03-01		Boeing	747-100 and -200 Series
2000-03-02		General Electric	Engine: GE90-90B, -85B, and -76B Series
2000-03-03		General Electric	Engine: CF34-3A1 and -3B1 Series
<b>Biweekly 2000-04</b>			
99-23-26 R1		General Electric	Engine: CF34-1A, CF34-3A, -3A1, -3A2, and CF34-3B +
2000-02-27		Empresa	EMB-110P1 and EMB-110P2
2000-02-39		Airbus	A300 Series
2000-03-04		General Electric	Engine: CF6-80C2 Series turbofan
2000-03-05		Boeing	737-200 Series
2000-03-07		Rolls-Royce	Engine: RB211-524H-36 Series turbofan
2000-03-08		McDonnell Douglas	MD-90-30
2000-03-10		McDonnell Douglas	MD-11 Series
2000-03-11		McDonnell Douglas	MD-11 Series
2000-03-12		McDonnell Douglas	MD-11 Series
2000-03-13		McDonnell Douglas	MD-11 Series
2000-03-14		McDonnell Douglas	MD-11 Series
2000-03-15		McDonnell Douglas	MD-11 and MD-11F Series
2000-03-16		McDonnell Douglas	MD-11 Series
2000-03-17	S 97-23-01	Fairchild	SA226 and SA227 Series
2000-03-20		Airbus	A300-600
2000-03-21		Boeing	767
2000-03-22		Boeing	747-100, -200, and 747SP Series
2000-04-02		Boeing	737-100, -200, -300, -400, and -500 Series
2000-04-03		McDonnell Douglas	DC-3 and DC-4 Series
2000-04-04		Fokker	F.28 Mark 0070 and 0100 Series
2000-04-05		Israel	Astra SPX Series
2000-04-06		Airbus	A319, A320, and A321 Series
2000-04-07		British Aerospace	ATP
2000-04-08		Boeing	737-200C Series
2000-04-09		Empresa	EMB-135 and EMB-145 Series
2000-04-10		Hoffmann	Propeller: HO27( ) and HO4/27 Series
2000-04-11		Airbus	A319, A320, and A321 Series
<b>Biweekly 2000-05</b>			
98-21-21	R1	Bob Fields Aerocessories	Appliance: Electric inflatable door seals
2000-03-51		McDonnell Douglas	DC-9, MD-90-30, 717-200, and MD-88
2000-04-13		Aerospatiale	ATR72 Series

## LARGE AIRCRAFT

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<b>Biweekly 2000-05...Cont'd</b>			
2000-04-14		General Electric	Engine: CF6-80C2 A1/A2/A3/A5/A8/A5F/B1/B2/B4/B6 +
2000-04-17		Boeing	747-100, -200, and -300 Series
2000-04-18		Boeing	757 Series
2000-04-19		Dassault	Mystere-Falcon 50 Series
2000-04-22		Rolls-Royce	Engine: RB211-524G2-T-19, RB211-524G3-T-19, +
2000-04-23		Dornier	328-100 Series and 328-300 Series
2000-05-09		Boeing	757-200, -200PF, and -200CB Series
2000-05-10		General Electric	Engine: GE90-85B Series turbofan
<b>Biweekly 2000-06</b>			
2000-03-03	COR	General Electric	Engine: CF34-3A1 and -3B1 Series turbofan
2000-04-24		Honeywell International	Appliance: 36-300(A), 36-280(B), and 36-280(D) Series
2000-05-01		McDonnell Douglas	MD-11 Series
2000-05-02		Fokker	F27 Mark 050, 200, 500, and 600 Series
2000-05-04		Airbus	A330 and A340 Series
2000-05-05		Construcciones Aeronauticas	CN-235-100 and CN-235-200 Series
2000-05-07		Airbus	A300 and A300-600 Series
2000-05-08		Airbus	A319 and A321 Series
2000-05-14	S 80-22-53	AlliedSignal	Engine: ALF502 and LF507 Series turbofan
2000-05-18		Airbus	A300, A310, and A300-600 Series
2000-05-19		Boeing	727 Series
2000-05-20		Dassault	Fan Jet Falcon, Mystere-Falcon 20, 50, 00, and 900 Series +
2000-05-21		Airbus	A319, A320, A321, A330, and A340 Series
2000-05-24		Honeywell International	Appliance: KAP 140 or KFC 225 autopilot system
2000-05-25	S 96-14-09	British Aerospace	BAe 146-100A, and -300 Series
2000-05-26	S 93-18-04	Aerospatiale	ATR42-200, ATR42-300, and ATR42-320 Series
2000-05-27	S 98-21-06	British Aerospace	BAe 146-100A, -200A, and -300A Series
2000-05-28		British Aerospace	BAe 146 and Avro 146-RJ Series
2000-05-29		Boeing	737-100, -200, -300, -400, and -500 Series
2000-05-30		Boeing	747-100, -100B, -100B SUD, -200B, -200C, -200F, -300 +
2000-06-02		Dornier	228-100, 228-101, 228-200, 228-201, 228-202, +
2000-06-04		Fairchild	SA226-T, SA226-AT, SA226-T(B), SA227-AT, +
<b>Biweekly 2000-07</b>			
2000-05-22		CFM International	Engine: CFM56-2, -2A, -2B, -3, -3B, and -3C Series
2000-06-08	S 98-01-15	Airbus	A330-301, -321, -322, -341, -342, A340-211, -212, -213 +
2000-06-13	S 98-25-06	Boeing	737-200, -200C, -300, -400 Series
2000-07-01	S 98-13-34	Embraer-Empresa Brasileira	EMB-145 Series
2000-07-02		McDonnell Douglas	MD-11 Series
2000-07-51	E	McDonnell Douglas	717-200 Series
<b>Biweekly 2000-08</b>			
2000-01-05	S 99-18-03	Boeing	747-100B, -200, -300, and SP Series
2000-05-03		Airbus	A300-600 and A310 Series
2000-05-12		Rolls-Royce	Engine: RB211-524G2-19, RB211-524G3-19, +
2000-05-13		Boeing	737-100, -200, -300, -400, and -500 Series
99-13-08	R1	Lockheed	L-1011-385 Series
99-23-22 R2	Rescission	Transport Category Airplanes	Appliance: Mode "C" Transponder
2000-07-05	S 99-07-06	Boeing	767 Series

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### Biweekly 2000-08...Cont'd

2000-07-06		Boeing	737-100, -200, -200C, -300, -400, and -500 Series
2000-07-07		Airbus	A300 Series
2000-07-08		Boeing	777 Series
2000-07-10		Boeing	747-200B, -300, -400, -400D, -400F Series
2000-07-11		Industrie Aero. Mec.	Piaggio P-180
2000-07-13		Boeing	757-200, -200PF Series
2000-07-14		McDonnell Douglas	MD-11 Series
2000-07-15		McDonnell Douglas	MD-11 Series
2000-07-16	S 94-11-06	McDonnell Douglas	MD-11 and MD-11F Series
2000-07-18		McDonnell Douglas	MD-11 and MD-11F Series
2000-07-20		McDonnell Douglas	MD-11 Series
2000-07-21		McDonnell Douglas	MD-11 Series
2000-07-22		Airbus	A300-600 Series
2000-07-23		Bombardier	DHC-8-100 Series
2000-07-24		Fokker	F.28 Mark 0070 and 0100
2000-07-25		Gulfstream Aerospace	G-IV Series
2000-07-27		Transport Category Airplanes	Appliance: Honeywell Air Data Inertial Reference Unit
2000-07-28	S 99-18-22	Fokker	F27 Series
2000-07-29	S 98-16-09	Airbus	A300, A310, and A300-600 Series
2000-08-01		Rolls-Royce	Engine: Tay 650-15 Series Turbofan
2000-08-03	S 2000-05-01	McDonnell Douglas	MD-11 Series

**BOEING  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-01-05 BOEING:** Amendment 39-11502. Docket 99-NM-361-AD. Supersedes AD 99-18-03, Amendment 39-11269.

Applicability: Model 747-100B, -200, -300, and SP series airplanes, equipped with Rolls Royce RB211-524B2, C2, and D4 engines; certificated in any category, as listed in the following service bulletins:

- Boeing Alert Service Bulletin 747-78A2148, dated June 1, 1995;
- Boeing Service Bulletin 747-78A2148, Revision 1, dated July 20, 1995;
- Boeing Service Bulletin 747-78-2136, dated May 11, 1995; and
- Boeing Service Bulletin 747-78-2156, dated October 31, 1996.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent inadvertent deployment of a thrust reverser during flight and consequent reduced controllability of the airplane, accomplish the following:

**RESTATEMENT OF REQUIREMENTS OF AD 99-18-03:**

**Repetitive Inspections and Tests**

(a) Within 90 days after September 15, 1999 (the effective date of AD 99-18-03, amendment 39-11269): Perform the applicable inspections and tests of the thrust reverser control and indication system on each engine, in accordance with Part III.A. through III.G. of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-78A2148, dated June 1, 1995, or Boeing Service Bulletin 747-78A2148, Revision 1, dated July 20, 1995. Repeat the applicable inspections and tests thereafter at intervals not to exceed 18 months, until accomplishment of paragraph (c) of this AD.

**Corrective Actions**

(b) If any inspection or test required by paragraph (a) of this AD cannot be successfully performed as specified in the service bulletin, or if any discrepancy is detected during any inspection or test, prior to further flight, repair in accordance with Boeing Alert Service Bulletin 747-78A2148, dated June 1, 1995, or Boeing Service Bulletin 747-78A2148, Revision 1, dated July 20, 1995. Additionally, prior to further flight, any failed inspection or test required by paragraph (a) of this AD must be repeated and successfully accomplished.

**Modification**

(c) Within 36 months after September 15, 1999: Install an additional locking system on the thrust reversers in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-78-2156, dated October 31, 1996. Prior to or concurrent with accomplishment of Boeing Service Bulletin 747-78-2156, dated October 31, 1996: Accomplish Boeing Service Bulletin 747-78-2136, dated May 11, 1995; and Rolls-Royce Service Bulletins RB.211-71-B545, Revision 2, dated August 8, 1997, RB.211-71-B551, Revision 1, dated March 20, 1998, and RB.211-78-B552, dated June 21, 1996. Accomplishment of these actions constitutes terminating action for the repetitive inspections and tests required by paragraph (a) of this AD.

**Operational Checks**

(d) Within 3,000 flight hours after accomplishing the modification required by paragraph (c) of this AD, or within 1,000 flight hours after September 15, 1999, whichever occurs later: Perform operational checks of the number 2 and number 3 gearbox locks and of the air motor brake, in accordance with the procedures described in Appendix 1 (including Figure 1) of this AD. Repeat the operational checks thereafter at intervals not to exceed 3,000 flight hours.

**Corrective Actions**

(e) If any operational check required by paragraph (d) of this AD cannot be successfully performed as specified in the procedures described in Appendix 1 (including Figure 1) of this AD, or, if any discrepancy is detected during any operational check, prior to further flight, repair in accordance with the procedures specified in the Boeing 747 Airplane Maintenance Manual. Additionally, prior to further flight, any failed operational check required by paragraph (d) of this AD must be repeated and successfully accomplished. Continue to repeat the operational checks thereafter at intervals not to exceed 3,000 flight hours.

**Alternative Methods of Compliance**

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport

Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

#### **Special Flight Permits**

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

#### **Incorporation by Reference**

(h) Except as provided by paragraphs (d) and (e) of this AD, the actions shall be done in accordance with the applicable service bulletins:

- Boeing Service Bulletin 747-78-2136, dated May 11, 1995;
- Boeing Alert Service Bulletin 747-78A2148, dated June 1, 1995;
- Boeing Service Bulletin 747-78A2148, Revision 1, dated July 20, 1995;
- Boeing Service Bulletin 747-78-2156, dated October 31, 1996;
- Rolls-Royce Service Bulletin RB.211-78-B552, dated June 21, 1996;
- Rolls-Royce Service Bulletin RB.211-71-B545, Revision 2, dated August 8, 1997; or
- Rolls-Royce Service Bulletin RB.211-71-B551, Revision 1, dated March 20, 1998.

This incorporation by reference was approved previously by the Director of the Federal Register as of September 15, 1999 (64 FR 47365, August 31, 1999). Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(i) This amendment becomes effective on January 24, 2000.

#### **FOR FURTHER INFORMATION CONTACT:**

Ed Hormel, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (206) 227-2681; fax (206) 227-1181.

Issued in Renton, Washington, on January 3, 2000.

Vi L. Lipski, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service

### **APPENDIX 1**

#### **GEARBOX LOCK AND AIR MOTOR BRAKE TEST**

##### **A. GENERAL**

To do the test of the gearbox locks and air motor brake, you must do the steps that follow:

- (a) Do the deactivation procedure of the thrust reverser system.
- (b) Do the test of the air motor brake.
- (c) Do the test of the gearbox locks.
- (d) Do the activation procedure of the thrust reverser system.

##### **B. EQUIPMENT**

- (1) CP30784 - INA Access Platform, Rolls-Royce
- (2) CP30769 - Protection Pads, Rolls-Royce
- (3) CP30785 - Access Stools, Rolls-Royce
- (4) UT1293/1 - Load Tool, Rolls-Royce (2 required)

##### **C. PROCEDURE (Fig. 1).**

**WARNING:** DO THE DEACTIVATION PROCEDURE OF THE THRUST REVERSER SYSTEM, WHICH MUST INCLUDE THE INSTALLATION OF LOCK BARS (OR BLOCKERS), TO PREVENT THE ACCIDENTAL OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER COULD CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

- (1) Do the deactivation procedure of the thrust reverser in the forward thrust position for ground maintenance.
- (2) Use a 0.25-inch (6.4-mm) square drive to turn the manual lock release screw to release the No. 2 and No. 3 gearbox locks.

**NOTE:** It is not always easy to turn the manual lock release screws. This is because of a preload in the systems. To release the preload, lightly turn the manual cycle and lockout shafts in the stow direction.

- (a) Make sure the lock indicators are extended at gearboxes No. 2 and No. 3.

## (3) Do a test of the air motor brake:

(a) IF YOU USE THE LOAD TOOLS; Try to move the translating cowl in the extend direction as follows:

- 1) Remove the lock bars that you installed in the deactivation procedure.
- 2) Install the load tools through the cutouts and into the No. 2 and No. 3 gearboxes.
- 3) Attach the torque wrenches to the load tools.
- 4) Try to move the translating cowl in the extend direction.

(b) IF YOU DO NOT USE THE LOAD TOOLS; Try to move the translating cowl in the extend direction as follows:

- 1) Remove the lock bars that you installed in the deactivation procedure.
- 2) Put the 0.25-inch (6.4-mm) square drive extensions into the manual cycle and lockout shaft at the No. 2 and No. 3 gearboxes.
  - a) Attach the standard drive tools.
- 3) Try to move the translating cowl in the extend direction.

(c) If the translating cowl moves, replace the air motor and shutoff valve.

## (4) Do a test of the gear box locks:

**NOTE:** The steps that follow are for the No. 3 gearbox. Then, do these steps again for the No. 2 gearbox.

- (a) Install the lock bars in the manual cycle and lockout shafts at the No. 2 and No. 3 gearboxes.
- (b) Install the INA access platform in the exhaust mixer duct.
- (c) Install the protection pads and the access stools.
- (d) Release the air motor brake:
  - 1) Open the air motor access and pressure relief panel.
  - 2) Pull the air motor brake release handle forward and turn it counterclockwise to lock the handle in its position.
- (e) Turn the manual lock release screw clockwise to engage the No. 3 gearbox lock.
  - 1) Make sure that the lock indicator is retracted (under the surface) at gearbox No. 3.
- (f) Make sure No. 2 gearbox lock is released.
  - 1) Make sure the lock indicator is extended at gearbox No. 2.
- (g) IF YOU USE THE LOAD TOOLS; Do a check of the lock dogs as follows:
  - 1) Remove the lock bars from the No. 2 and No. 3 gearboxes.
  - 2) Install the load tool through the cutout and into the No. 3 gearbox.
  - 3) Attach the torque wrench to the load tool.

**CAUTION:** DO NOT APPLY A TORQUE LOAD OF MORE THAN 30 POUND-INCHES (3.4 NEWTON-METERS) TO THE MANUAL CYCLE AND LOCK OUT SHAFT. A LARGER TORQUE LOAD CAN CAUSE DAMAGE TO THE MECHANISM.

- 4) Apply a torque counterclockwise through the manual wind position of the No. 3 gearbox.
  - a) If the translating cowl does not move, the lock bar touched one of the two lock dogs.
  - b) If the translating cowl moved, lock the thrust reverser until the No. 3 gearbox is replaced.
- 5) Turn the manual lock release screw counterclockwise to release the gearbox lock.
  - a) Make sure that the indication rod comes out of the No. 3 gearbox.
- 6) Turn the manual cycle and lockout shaft counterclockwise 1/4 turn.
- 7) Turn the manual lock release screw clockwise to engage the No. 3 gearbox lock.
  - a) Make sure that the indication rod is fully retracted (under the surface).

**CAUTION:** DO NOT APPLY A TORQUE LOAD OF MORE THAN 30 POUND-INCHES (3.4 NEWTON-METERS) TO THE MANUAL CYCLE AND LOCKOUT SHAFT. A GREATER TORQUE LOAD CAN CAUSE DAMAGE TO THE MECHANISM.

- 8) Apply a torque counterclockwise through the manual wind position of the No. 3 gearbox.
  - a) If the manual cycle and lockout shaft can not be turned more than approximately 1/4 turn, the second lock dog is serviceable.
  - b) If the manual cycle and lockout shaft can be turned more than approximately 1/4 turn, the second lock dog is unserviceable. Lock the thrust reverser until the No. 3 gearbox is replaced.

**NOTE:** The two lock dogs are found 1/2 turn apart when you use the manual cycle and lockout shaft. If necessary, do the check again to make sure that the lock dogs are serviceable.

- 9) Do the procedure given above for the No. 2 gearbox lock.

(h) IF YOU DO NOT USE THE LOAD TOOLS; Do a check of the lock dogs as follows:

- 1) Remove the lock bars from the No. 2 and No. 3 gearboxes.
- 2) Put the 0.25-inch (6.4-mm) square drive extensions into the manual cycle and lockout shaft at the No. 2 and No. 3 gearboxes.
  - a) Attach the standard drive tools.



**CAUTION:** DO NOT APPLY A TORQUE LOAD OF MORE THAN 30 POUND-INCHES (3.4 NEWTON-METERS) TO THE MANUAL CYCLE AND LOCKOUT SHAFT. A LARGER TORQUE LOAD CAN CAUSE DAMAGE TO THE MECHANISM.

- 3) Apply a torque counterclockwise through the manual wind position of the No. 3 gearbox.
  - a) If the translating cowl does not move, the lock bar touched one of the two lock dogs.
  - b) If the translating cowl moved, lock the thrust reverser until the No. 3 gearbox is replaced.
- 4) Turn the manual lock release screw counterclockwise to release the gearbox lock.
  - a) Make sure that the indication rod comes out of the No. 3 gearbox.
- 5) Turn the manual cycle and lockout shaft counterclockwise 1/4 turn.
- 6) Turn the manual lock release screw clockwise to engage the No. 3 gearbox lock.
  - a) Make sure that the indication rod is fully retracted (under the surface).

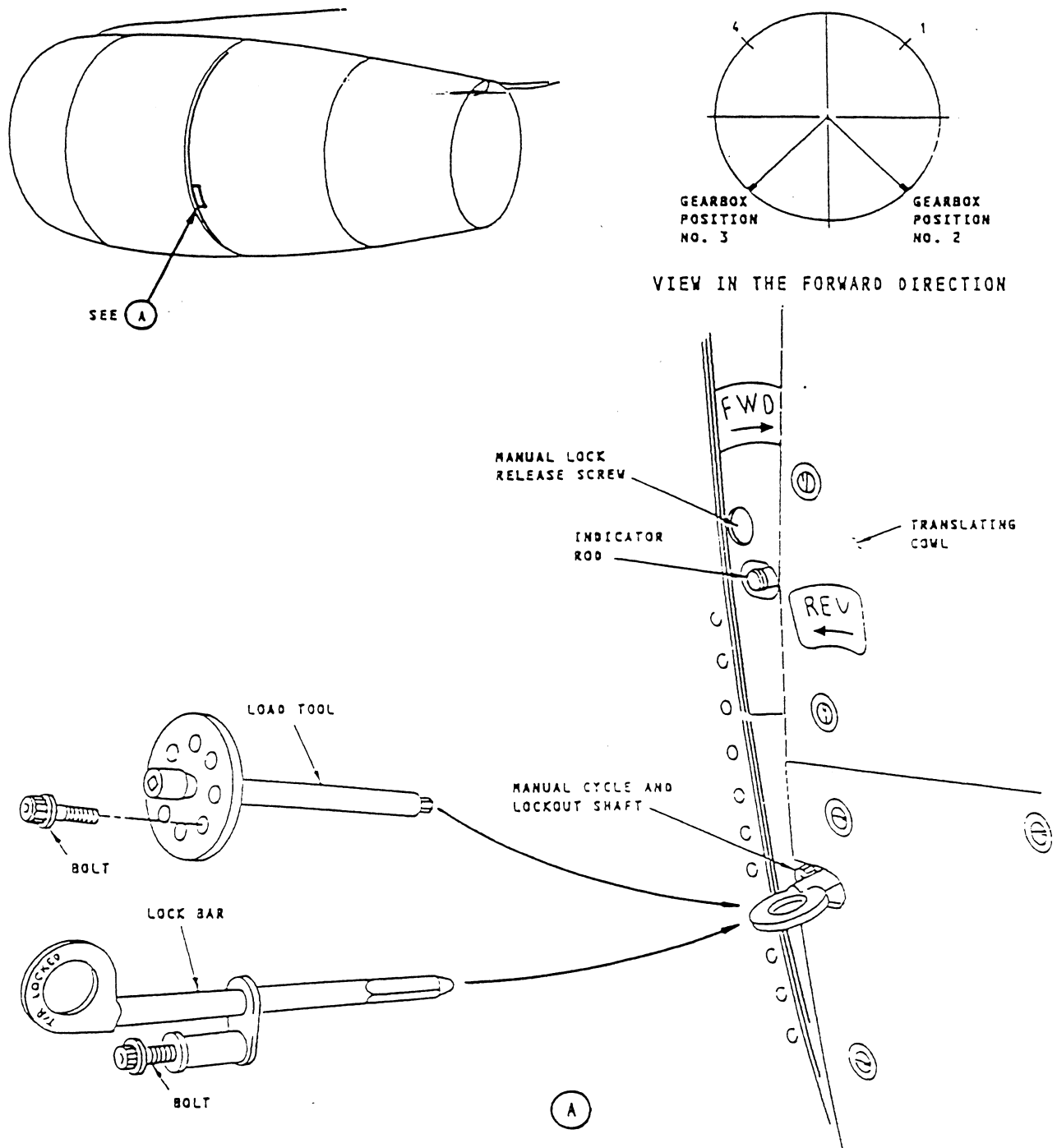
**CAUTION:** DO NOT APPLY A TORQUE LOAD OF MORE THAN 30 POUND-INCHES (3.4 NEWTON-METERS) TO THE MANUAL CYCLE AND LOCKOUT SHAFT. A GREATER TORQUE LOAD CAN CAUSE DAMAGE TO THE MECHANISM.

- 7) Apply a torque counterclockwise through the manual wind position of the No. 3 gearbox.
  - a) If the manual cycle and lockout shaft can not be turned more than approximately 1/4 turn, the second lock dog is serviceable.
  - b) If the manual cycle and lockout shaft can be turned more than approximately 1/4 turn, the second lock dog is unserviceable. Lock the thrust reverser until the No. 3 gearbox is replaced.

**NOTE:** The two lock dogs are found 1/2 turn apart when you use the manual cycle and lockout shaft. If necessary, do the check again to make sure that the lock dogs are serviceable.

- 8) Do the procedure given above for the No. 2 gearbox lock.
- (5) Install the lock bars in the manual cycle and lockout shafts at the No. 2 and No. 3 gearboxes.
- (6) Apply the air motor manual brake:
  - (a) Turn the air motor brake release handle clockwise and then release.
  - (b) Close the air motor access and pressure relief panel.
- (7) Make sure the No. 2 and No. 3 gearbox locks are released.
  - (a) Make sure the lock indicator rods are extended at the No. 2 and No. 3 gearboxes.
- (8) IF YOU USE THE LOAD TOOLS; Try to move the translating cowl in the extend direction as follows:
  - (a) Remove the lock bars from the No. 2 and No. 3 gearboxes.
  - (b) Install the load tools through the cutouts and into the No. 2 and No. 3 gearboxes.
  - (c) Attach the torque wrenches to the load tools.
  - (d) Try to move the translating cowl in the extend direction.
- (9) IF YOU DO NOT USE THE LOAD TOOLS; Try to move the translating cowl in the extend direction as follows:
  - (a) Remove the lock bars from the No. 2 and No. 3 gearboxes.
  - (b) Put the 0.25-inch (6.4-mm) square drive extensions into the manual cycle and lockout shaft at the No. 2 and No. 3 gearboxes.
    - 1) Attach the standard drive tools.
  - (c) Try to move the translating cowl in the extend direction.
- (10) If the translating cowl moves, do the full test again.
  - (a) If the translating sleeve moves again, lock the thrust reverser until you can replace the two locking gearboxes and the air motor and shutoff valve.
- (11) Remove the access stools and protection pads.
- (12) Remove the INA access platform from the exhaust mixer duct.
- (13) Do the activation procedure of the thrust reverser system.
- (14) Do the functional test of the thrust reverser system.

Figure 1



**NOTE:** GEARBOX POSITION NO. 3 IS SHOWN.  
GEARBOX POSITION NO. 2 IS THE SAME.

Lock Bar/Load Tool Installation and Gearbox Manual Lock Release  
Figure 1

**AIRBUS INDUSTRIE  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-05-03 AIRBUS INDUSTRIE:** Amendment 39-11612. Docket 99-NM-82-AD.

Applicability: Model A300-600 and A310 series airplanes, certificated in any category, on which Airbus Modification 06925 has been accomplished in production; except airplanes on which Airbus Modification 08907 has been accomplished.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking of the inner flange of fuselage frame FR73A, which could result in reduced structural integrity of the fuselage, accomplish the following:

**HFEC Inspection**

(a) Prior to the accumulation of 18,000 total flight cycles, or within 3,000 flight cycles after the effective date of this AD, whichever occurs later: Perform a high frequency eddy current (HFEC) inspection to detect cracking of the inner flange (left and right sides) of the rear fuselage frame FR73A, between beams 5 and 7, in accordance with Airbus Service Bulletin A310-53-2107, Revision 01 (for Model A310 series airplanes), or A300-53-6116, Revision 01 (for Model A300-600 series airplanes); both dated July 2, 1999; as applicable.

(1) If no crack is detected, repeat the HFEC inspection thereafter at intervals not to exceed 5,000 flight cycles.

(2) For any crack that is less than or equal to 0.20 inch (5.0 millimeters) in length: Prior to further flight, accomplish either paragraph (a)(2)(i) or (a)(2)(ii) of this AD.

(i) Rework the frame in accordance with the applicable service bulletin. Within 3,000 flight cycles after accomplishing the rework, replace the fuselage frame FR73A between beams 5 and 7 with a new frame section in accordance with the applicable service bulletin. Or

(ii) Replace the fuselage frame FR73A between beams 5 and 7 with a new frame section, in accordance with the applicable service bulletin.

(3) For any crack greater than 0.20 inch (5.0 millimeters) in length: Prior to further flight, accomplish either paragraph (a)(3)(i) or (a)(3)(ii) of this AD.

(i) Repair in accordance with a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate; or the Direction Générale de l'Aviation Civile (DGAC) (or its delegated agent). Or

(ii) Replace the fuselage frame FR73A between beams 5 and 7 with a new section, in accordance with the applicable service bulletin.

(b) Within 18,000 flight cycles after any replacement accomplished in accordance with paragraph (a)(2)(i), (a)(2)(ii), or (a)(3)(ii) of this AD: Repeat the inspection specified by paragraph (a) of this AD. Thereafter, repeat the inspection at intervals not to exceed 5,000 flight cycles.

(c) Submit a report of inspection findings (both positive and negative) of any inspection required by this AD to Airbus Industrie, Customer Services Directorate, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; at the applicable time specified in paragraph (c)(1) or (c)(2) of this AD. The report must include the inspection results, a description of any discrepancies found, the airplane serial number, the age of the airplane since entry into service, and the number of landings and flight hours on the airplane. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

(1) For airplanes on which the inspection required by paragraph (a) of this AD is accomplished after the effective date of this AD: Submit the report within 10 days after performing the inspection.

(2) For airplanes on which the inspection required by paragraph (a) of this AD has been accomplished prior to the effective date of this AD: Submit the report within 10 days after the effective date of this AD.

**Alternative Methods of Compliance**

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

**Special Flight Permits**

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(f) Except as provided by paragraph (a)(3)(i) of this AD, the actions shall be done in accordance with Airbus Service Bulletin A310-53-2107, Revision 01, dated July 2, 1999, or Airbus Service Bulletin A300-53-6116, Revision 01, dated July 2, 1999; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in French airworthiness directive 1999-013-276(B), dated January 13, 1999.

(g) This amendment becomes effective on May 19, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on April 5, 2000.

Donald L. Riggins, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**ROLLS-ROYCE  
AIRWORTHINESS DIRECTIVE  
ENGINE  
LARGE AIRCRAFT**

**2000-05-12 ROLLS-ROYCE plc:** Amendment 39-11622. Docket 2000-NE-01-AD.

Applicability: Rolls-Royce plc (R-R) Models RB211-524G2-19, RB211-524G3-19, RB211-524H2-19, RB211-524G2-T-19, RB211-524G3-T-19, RB211-524H2-T-19, and RB211-524H-36 turbofan engines, with fan blades, part numbers (P/Ns) UL36245, UL38009, UL38052, or UL38628, installed. These engines are installed on but not limited to Boeing 747-400 series and 767 series airplanes.

NOTE 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent possible multiple fan blade failures, which could result in an uncontained engine failure and damage to the aircraft, accomplish the following:

**Ultrasonic Inspections**

(a) Ultrasonically inspect the dovetail roots of fan blades, P/Ns UL36245, UL38009, UL38052, and UL38628, for cracks as follows:

**Initial Inspection**

- (1) Initially inspect at the latest of:
  - (i) before accumulating 2,050 total fan blade part cycles-since-new.
  - (ii) 50 fan blade cycles-in-service (CIS) after the effective date of this AD.
  - (iii) 200 fan blade CIS since last inspection.

**Service Bulletin**

- (2) Inspect and determine rejection status in accordance with the following paragraphs of R-R Service Bulletin (SB) RB.211-72- C818, Revision 2, dated October 8, 1999:
  - (i) Compliance section C, page 2.
  - (ii) Accomplishment Instructions section, items A through and including B(6), pages 5 and 6.
  - (iii) Acceptance criteria section, Appendix 1 (4), items A and B, page 9.

**Earlier Versions of Service Bulletin**

(3) Initial inspections accomplished using the original issue of R-R SB RB.211-72-C818, dated August 6, 1999, or Revision 1, dated August 20, 1999, are acceptable.

**Repetitive Inspections**

(4) Thereafter, inspect at intervals not to exceed 200 CIS since last inspection in accordance with R-R RB.211-72-C818, Revision 2, dated October 8, 1999.

**Cracked Parts**

(5) Prior to further flight, remove from service cracked fan blades and replace with serviceable parts in accordance with R-R RB.211-72-C818, Revision 2, dated October 8, 1999.

**Optional Terminating Action**

(b) Accomplishment of either of the following actions constitutes terminating action to the inspections required by paragraph (a) of this AD:

- (1) Remove from service fan blades, P/Ns UL36245, UL38009, UL38052, and UL38628, and replace with serviceable fan blades with P/Ns other than P/Ns UL36245, UL38009, UL38052, and UL38628, or
- (2) Rework fan blades to the improved configuration and mark the reworked fan blades with P/Ns FW12018, FW12019, FW12020, or FW12021, in accordance with the Accomplishment Instructions of R-R SB RB.211-72-C891, dated February 2, 2000.

**Alternative Methods of Compliance**

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Engine Certification Office.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Engine Certification Office.

2000-05-12

**Ferry Flights**

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(e) The actions required by this AD shall be performed in accordance with the R-R SB RB.211-72-C818, Revision 2, dated October 8, 1999, and SB RB.211-72-C891, dated February 2, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Rolls-Royce plc, PO Box 31, Derby, England; telephone: International Access Code 011, Country Code 44, 1332-249428, fax International Access Code 011, Country Code 44, 1332-249223. Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(f) This amendment becomes effective on March 31, 2000.

**FOR FURTHER INFORMATION CONTACT:**

James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone 781-238-7176, fax 781-238-7199.

Issued in Burlington, Massachusetts, on March 6, 2000.

David A. Downey, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.

**BOEING  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-05-13 BOEING:** Amendment 39-11623. Docket 98-NM-57-AD.

Applicability: Model 737-100, -200, -300, -400, and -500 series airplanes; line positions 1 through 2135 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fracture of the main landing gear (MLG) axle and the separation of the wheel from the MLG, and consequent reduced controllability of the airplane, accomplish the following:

**Inspection, Modification, and Corrective Action**

(a) For Model 737-100 and -200 series airplanes equipped with AlliedSignal (ALS/Bendix) brake assembly installations having Boeing part numbers (P/N) 10-61063-14, -18, or -21, on which the original gaskets have been replaced with aluminum-nickel-bronze gaskets in accordance with Boeing Service Bulletin 737-32-1253, dated November 7, 1991: Except as provided by paragraph (d) of this AD, within 200 days or 1,500 flight cycles after the effective date of this AD, whichever occurs later, accomplish the requirements of paragraphs (a)(1), (a)(2), and (a)(3) of this AD.

(1) Perform either a one-time magnetic particle inspection or a one-time high frequency eddy current inspection of the MLG axle flange to detect cracking, except that a high frequency eddy current inspection may only be accomplished if the axle flange has not been repaired previously and coated with a nickel sulfamate finish. The magnetic particle inspection or high frequency eddy current inspection is to be accomplished in accordance with procedures specified in paragraph B. of the "Recommended Operator Action" section of Boeing All Operators Telex (AOT) M-7272-96-1442, dated March 29, 1996. If any cracking is detected, prior to further flight, repair the MLG flange, in accordance with Boeing Overhaul Manual 32-11-11, or other method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

(2) If any corrosion or fretting is found during accomplishment of the inspection required by paragraph (a)(1) of this AD: Prior to further flight, accomplish the repair procedures specified in the "Recommended Operator Action" section of Boeing AOT M-7272-96-1442, dated March 29, 1996.

(3) Accomplish the modification of the brake torque tube mounting holes, in accordance with AlliedSignal Service Bulletin 2601042-32-003, dated March 15, 1997.

**Inspection, Modification, and Corrective Action**

(b) For Model 737-100 and -200 series airplanes equipped with AlliedSignal (ALS/Bendix) brake assembly installations having Boeing P/N 10-61063-14, -18, or -21, on which the original gaskets have not been replaced with new aluminum-nickel-bronze gaskets in accordance with Boeing Service Bulletin 737-32-1253, dated November 7, 1991: Except as provided by paragraph (d) of this AD, within 200 days or 1,500 flight cycles after the effective date of this AD, whichever occurs later, accomplish the requirements of paragraphs (b)(1), (b)(2), (b)(3), and (b)(4) of this AD.

(1) Perform either a one-time magnetic particle inspection or a one-time high frequency eddy current inspection of the MLG axle flange to detect cracking, except that a high frequency eddy current inspection may only be accomplished if the axle flange has not been repaired previously and coated with a nickel sulfamate finish. The magnetic particle inspection or high frequency eddy current inspection is to be accomplished in accordance with procedures specified in paragraph B. of the "Recommended Operator Action" section of Boeing AOT M-7272-96-1442, dated March 29, 1996. If any cracking is detected, prior to further flight, repair the MLG flange, in accordance with Boeing Overhaul Manual 32-11-11, or other method approved by the Manager, Seattle ACO.

(2) If any corrosion or fretting is found during accomplishment of the inspection required by paragraph (b)(1) of this AD: Prior to further flight, accomplish the repair procedures specified in the "Recommended Operator Action" section of Boeing AOT M-7272-96-1442, dated March 29, 1996.

(3) Accomplish the modification of the brake torque tube mounting holes, in accordance with AlliedSignal Service Bulletin 2601042-32-003, dated March 15, 1997.

(4) Accomplish the modification of the affected brake mounting hardware in accordance with Boeing Service Bulletin 737-32-1253, dated November 7, 1991.

**Inspection, Modification, and Corrective Action**

(c) For Model 737-100, -200, -300, -400, and -500 series airplanes other than those identified in paragraphs (a) and (b) of this AD: Except as provided by paragraph (d) of this AD, within 200 days or 1,500 flight cycles

after the effective date of this AD, whichever occurs later, accomplish the requirements of paragraphs (c)(1), (c)(2), and (c)(3) of this AD.

(1) Perform either a one-time magnetic particle inspection or a one-time high frequency eddy current inspection of the MLG axle flange to detect cracking, except that a high frequency eddy current inspection may only be accomplished if the axle flange has not been repaired previously and coated with a nickel sulfamate finish. The magnetic particle inspection or high frequency eddy current inspection is to be accomplished in accordance with procedures specified in paragraph B. of the "Recommended Operator Action" section of Boeing AOT M-7272-96-1442, dated March 29, 1996. If any cracking is detected, prior to further flight, repair the MLG flange, in accordance with Boeing Overhaul Manual 32-11-11, or other method approved by the Manager, Seattle ACO.

(2) If any corrosion or fretting is found during accomplishment of the inspection required by paragraph (c)(1) of this AD: Prior to further flight, accomplish the repair procedures specified in the "Recommended Operator Action" section of Boeing AOT M-7272-96-1442, dated March 29, 1996.

(3) Accomplish the modification of the affected brake mounting hardware in accordance with Boeing Service Bulletin 737-32-1253, dated November 7, 1991.

NOTE 2: Accomplishment of the magnetic particle or HFEC inspections of unrepaired axle flanges in accordance with Boeing Telex M-7272-96-1442, dated March 29, 1996, concurrent with or after installation of an aluminum-nickel-bronze gasket and shear studs, is considered acceptable for compliance with the requirements of paragraphs (a)(1) and (c)(1) of this AD.

#### **Optional Visual Inspection**

(d) The actions required by paragraphs (a), (b), and (c) of this AD may be accomplished at the time specified in paragraph (d)(1) of this AD, provided that the action specified in paragraph (d)(2) is accomplished.

(1) Within 1 year or 4,500 flight cycles after the effective date of this AD, whichever occurs later, accomplish the actions specified in paragraph (a), (b), or (c) of this AD, as applicable; and

(2) Within 200 days or 1,500 flight cycles after the effective date of this AD, whichever occurs later, perform a detailed visual inspection to detect fretting or corrosion of the axle flange bolt holes. If any fretting or corrosion is detected, prior to further flight, accomplish the repair procedures specified in the "Recommended Operator Action" section of Boeing AOT M-7272-96-1442, dated March 29, 1996.

NOTE 3: For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

#### **Alternative Methods of Compliance**

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

#### **Special Flight Permits**

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

#### **Incorporation by Reference**

(g) Except as provided by paragraphs (a)(1), (b)(1), and (c)(1) of this AD, the actions shall be done in accordance with Boeing All Operators Telex (AOT) M-7272-96-1442, dated March 29, 1996; AlliedSignal Service Bulletin 2601042-32-003, dated March 15, 1997; and Boeing Service Bulletin 737-32-1253, dated November 7, 1991; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(h) This amendment becomes effective on April 19, 2000.

#### **FOR FURTHER INFORMATION CONTACT:**

Rick Kawaguchi, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1153; fax (425) 227-1181.

Issued in Renton, Washington, on March 6, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.



**LOCKHEED  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**99-13-08 R1 LOCKHEED:** Amendment 39-11677. Docket 99-NM-252-AD. Revises AD 99-13-08, Amendment 39-11202.

Applicability: All Model L-1011-385 series airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracking in the web of the rear spar of the wing, which could result in failure of the rear spar of the wing and consequent fuel spillage, accomplish the following:

**RESTATEMENT OF ACTIONS REQUIRED BY AD 99-13-08, AMENDMENT 39-11202:**

**Inspections**

(a) Perform a visual inspection to detect signs of cracking and other discrepancies (i.e., corrosion, fastener looseness, nicks, scratches, or other surface damage) of the web-to-cap fasteners of the rear spar between inner wing station (IWS) 310 and IWS 343, as specified in Figure 2 of Lockheed Service Bulletin 093-57-218, dated April 11, 1996, or Revision 1, dated September 9, 1996; and of the web area around those fasteners; in accordance with Part I of the Accomplishment Instructions of that service bulletin. Perform the inspection at the applicable time specified in paragraph (a)(1) or (a)(2) of this AD.

(1) Except as provided by paragraph (a)(2) of this AD: Perform the initial inspection prior to the accumulation of the number of landings specified as the "inspection threshold" in Table I of Lockheed Service Bulletin 093-57-218, dated April 11, 1996, or Revision 1, dated September 9, 1996, or within 10 days after June 27, 1996 (the effective date of AD 96-12-24, amendment 39-9667), whichever occurs later.

(2) For airplanes on which the wing rear spar was modified prior to June 27, 1996, in accordance with one of the Lockheed service bulletins listed in paragraph (a)(2)(ii) of this AD, accomplish the inspection as follows:

(i) Perform the initial inspection prior to the accumulation of the number of landings specified as the "inspection threshold" in Table I of Lockheed Service Bulletin 093-57-218, dated April 11, 1996, or Revision 1, dated September 9, 1996, calculated from the time the wing rear spar was modified (rather than from the date of manufacture of the airplane), or within 10 days after June 27, 1996, whichever occurs later.

(ii) This paragraph applies to airplanes on which the wing rear spar has been modified in accordance with one of the following service bulletins:

- Lockheed Service Bulletin 093-57-184, Revision 6, dated October 28, 1991, or Revision 7, dated December 6, 1994; or
- Lockheed Service Bulletin 093-57-196, Revision 5, dated October 28, 1991, or Revision 6, dated December 6, 1994; or
- Lockheed Service Bulletin 093-57-203, Revision 3, dated October 28, 1991, or Revision 4, dated March 27, 1995; or
- Lockheed Service Bulletin 093-57-215, dated April 11, 1996.

**Repetitive Inspections**

(b) If no sign of cracking or other discrepancy is found during the inspection required by paragraph (a) of this AD, repeat that inspection thereafter at intervals not to exceed the number of landings specified as the "repeat visual inspection interval" in Table I of Lockheed Service Bulletin 093-57-218, dated April 11, 1996, or Revision 1, dated September 9, 1996.

**Corrective Actions**

(c) If any sign of cracking is found during an inspection required by paragraph (a) or (b) of this AD, prior to further flight, perform either eddy current surface scan inspections, or bolt hole eddy current inspections, as appropriate, to confirm cracking, in accordance with Lockheed Service Bulletin 093-57-218, dated April 11, 1996, or Revision 1, dated September 9, 1996.

(1) If no cracking is confirmed, repeat the inspection specified in paragraph (a) of this AD at intervals not to exceed the number of landings specified as the "repeat visual inspection interval" in Table I of the service bulletin.

(2) If any cracking is confirmed, prior to further flight, repair it in accordance with the service bulletin.

**Modification**

(d) Except as provided by paragraph (e) or (f) of this AD, as applicable: Prior to the accumulation of the number of landings specified as the threshold in Table 1 of Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996; or within 12 months after July 28, 1999 (the effective date of AD 99-13-08, amendment 39-11202); whichever occurs later; modify the web-to-cap fastener holes of the rear spar between IWS 299 and IWS 343 in accordance with Part II of the Accomplishment Instructions of Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996. Within 5,000 landings following accomplishment of the modification, perform the visual inspection required by paragraph (a) of this AD. Thereafter, repeat that inspection at intervals not to exceed the number of landings specified as the "repeat visual inspection interval" in Table I of Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996.

(e) For Model L-1011-385-3 series airplanes: Accomplishment of the modification specified in paragraph (e)(1) or (e)(2) of this AD, within 12 months after July 28, 1999, constitutes an acceptable alternative to the modification specified in paragraph (d) of this AD.

(1) Modify the upper and lower caps of the rear spar between IWS 228 and IWS 346 in accordance with Part I of the Accomplishment Instructions of Lockheed Service Bulletin 093-57-203, Revision 3, dated October 28, 1991; or Revision 4, dated March 27, 1995. Within 5,000 landings following accomplishment of the modification, perform the visual inspection required by paragraph (a) of this AD. Thereafter, repeat that inspection at intervals not to exceed the number of landings specified as the "repeat visual inspection interval" in Table I of Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996. Or

(2) Modify the left and right wing rear spars in accordance with the Accomplishment Instructions of Lockheed Service Bulletin 093-57-215, dated April 11, 1996. Within the thresholds specified in Table I of Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996 (calculated from the date of installation of Lockheed Service Bulletin 093-57-215, dated April 11, 1996), perform the visual inspection required by paragraph (a) of this AD. Thereafter, repeat that inspection at intervals not to exceed the number of landings specified as the "repeat visual inspection interval" in Table I of Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996.

NOTE 2: Accomplishment of the modification of the upper and lower caps of the rear spar between IWS 228 and IWS 346, in accordance with the Accomplishment Instructions of Lockheed Service Bulletin 093-57-203, dated July 25, 1988, Revision 1, dated August 11, 1989, or Revision 2, dated January 25, 1991, is considered acceptable for compliance with the modification specified in paragraph (e)(1) of this amendment.

(f) For Model L-1011-385-1 series airplanes: Accomplishment of the modification specified in paragraph (f)(1) or (f)(2) of this AD, within 12 months after July 28, 1999, constitutes an acceptable alternative to the modification specified in paragraph (d) of this AD.

(1) Modify the inboard rear spars in accordance with the Accomplishment Instructions of Lockheed Service Bulletin 093-57-184, Revision 6, dated October 28, 1991; or Revision 7, dated December 6, 1994. Within the thresholds specified in Table I of Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996 (calculated from the date of installation of Lockheed Service Bulletin 093-57-184, Revision 6, dated October 28, 1991, or Revision 7, dated December 6, 1994), perform the visual inspection required by paragraph (a) of this AD. Thereafter, repeat that inspection at intervals not to exceed the number of landings specified as the "repeat visual inspection interval" in Table I of Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996. Or

(2) Modify the inboard rear spars in accordance with the Accomplishment Instructions of Lockheed Service Bulletin 093-57-196, Revision 5, dated October 28, 1991; or Revision 6, dated December 6, 1994. Within the thresholds specified in Table I of Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996 (calculated from the date of installation of Lockheed Service Bulletin 093-57-196, Revision 5, dated October 28, 1991, or Revision 6, dated December 6, 1994), perform the visual inspection required by paragraph (a) of this AD. Thereafter, repeat that inspection at intervals not to exceed the number of landings specified as the "repeat visual inspection interval" in Table I of Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996.

NOTE 3: Accomplishment of the modification of the inboard rear spars, in accordance with the Accomplishment Instructions of Lockheed Service Bulletin 093-57-184, Revision 2, dated October 12, 1988; Revision 3, dated August 11, 1989; Revision 4, dated May 16, 1990; or Revision 5, dated May 23, 1990, is considered acceptable for compliance with the modification specified in paragraph (f)(1) of this amendment.

NOTE 4: Accomplishment of the modification of the inboard rear spars, in accordance with the Accomplishment Instructions of Lockheed Service Bulletin 093-57-196, Revision 1, dated October 25, 1988; Revision 2, dated July 31, 1989; Revision 3, dated March 7, 1990; or Revision 4, dated July 1, 1991, is considered acceptable for compliance with the modification specified in paragraph (f)(2) of this amendment.

(g) If any condition (i.e., number of discrepant fasteners per stiffener bay, or cracking) is identified during the accomplishment of the modification specified in Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996, and that condition exceeds the limits specified in paragraph B.(3) of Part II of the Accomplishment Instructions of the service bulletin, prior to further flight, repair in accordance with a method approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA, Small Airplane Directorate.

### **Alternative Method of Compliance**

(h) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 96-12-24, amendment 39-9667, or AD 99-13-08, amendment 39-11202, are approved as alternative methods of compliance with paragraph (d) of this AD.

NOTE 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

### **Special Flight Permits**

(i) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

### **Incorporation by Reference**

(j) Except as provided by paragraph (g) of this AD, the actions shall be done in accordance with the following service bulletins, as applicable:

- Lockheed Service Bulletin 093-57-184, Revision 6, dated October 28, 1991; or Lockheed Service Bulletin 093-57-184, Revision 7, dated December 6, 1994;
- Lockheed Service Bulletin 093-57-196, Revision 5, dated October 28, 1991; or Lockheed Service Bulletin 093-57-196, Revision 6, dated December 6, 1994;
- Lockheed Service Bulletin 093-57-203, Revision 3, dated October 28, 1991; or Lockheed Service Bulletin 093-57-203, Revision 4, dated March 27, 1995;
- Lockheed Service Bulletin 093-57-215, dated April 11, 1996; and
- Lockheed Service Bulletin 093-57-218, dated April 11, 1996; or Lockheed Service Bulletin 093-57-218, Revision 1, dated September 9, 1996.

(1) The incorporation by reference of Lockheed Service Bulletin 093-57-218, dated April 11, 1996, was approved previously by the Director of the Federal Register as of June 27, 1996 (61 FR 29642, June 12, 1996).

(2) The incorporation by reference of the remainder of the service bulletins listed above, was approved previously by the Director of the Federal Register as of July 28, 1999 (64 FR 33386, June 23, 1999).

(3) Copies may be obtained from Lockheed Martin Aircraft & Logistics Center, 120 Orion Street, Greenville, South Carolina 29605. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, Suite 450, Atlanta, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(k) This amendment becomes effective on May 22, 2000.

### **FOR FURTHER INFORMATION CONTACT:**

Thomas Peters, Aerospace Engineer, Systems and Flight Test Branch, ACE-116A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, Suite 450, Atlanta, Georgia 30337-2748; telephone (770) 703-6063; fax (770) 703-6097.

Issued in Renton, Washington, on April 5, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**TRANSPORT CATEGORY AIRPLANE  
AIRWORTHINESS DIRECTIVE  
APPLIANCE  
RESCISSION  
LARGE AIRCRAFT**

**99-23-22 R2 TRANSPORT CATEGORY AIRPLANES:** Amendment 39-11686. Docket No. 2000-NM-81-AD. Rescinds AD 99-23-22 R1, Amendment 39-11473.

Applicability: Transport category airplanes, as listed below, certificated in any category, equipped with any Mode "C" transponder with single Gillham code altitude input, including, but not limited to, the transponder part numbers listed below. Whether a Mode "C" transponder has a single Gillham code altitude input may be determined by reviewing the transponder installation instructions.

**Airplane Models:**

<b><u>Airbus Industrie</u></b>	<b><u>Lockheed</u></b>	<b><u>Boeing (MDC)</u></b>	<b><u>Bombardier</u></b>
A300	L-1011 TriStar	DC-10-30	CL-215-1A10
A310	L-188 Electra	DC-10-40	CL-215-6B11
<b><u>British Aerospace</u></b>	<b><u>CASA</u></b>	DC-9	CL-600-1A11
BAe Avro 146-RJ	CN-235	DC-9-81	CL-600-2A12
BAe ATP	<b><u>Dassault Aviation</u></b>	DC-9-82	CL-600-2B16
<b><u>Fokker</u></b>	Mystere Falcon 50	DC-9-83	<b><u>Gulfstream</u></b>
F28 Mark 0070	Mystere Falcon 900	DC-9-87	G1159 (G-II)
F28 Mark 0100	Mystere Falcon 200	Boeing 707	G-1159A (G-III)
F28 Mark 1000-4000	Fan Jet Falcon Series G	Boeing 727	G-IV
		Boeing 737	
		Boeing 747	

**Mode "C" Transponder Part Numbers:**

<b><u>Rockwell Collins</u></b>	<b><u>Bendix</u></b>	<b><u>Wilcox</u></b>	<b><u>IFF</u></b>
622-2224-001	066-1056-00	97637-201	APX-100
622-2224-003	066-1056-01	97637-301	APX-101
522-2703-001	066-1123-00		
522-2703-011	2041599-6508		
787-6211-001			
787-6211-002			

This rescission is effective April 20, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Peter Skaves, Aerospace Engineer, Airplane and Flight Crew Interface Branch, ANM-111, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2795; fax (425) 227-1320.

Issued in Renton, Washington, on April 7, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**BOEING  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-05 BOEING:** Amendment 39-11659. Docket 99-NM-72-AD. Supersedes AD 99-07-06, amendment 39-11091.

Applicability: Model 767 series airplanes; as listed in Boeing Alert Service Bulletin 767-54A0094, dated May 22, 1998; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent cracking of the diagonal brace of the nacelle strut, which could result in failure of the diagonal brace, and consequent fatigue failure of a strut secondary load path and separation of the engine and strut, accomplish the following:

**Initial Inspection**

(a) Perform a detailed visual inspection to detect cracking or damage of the forward and aft lugs of the diagonal brace of the nacelle strut, on the left and right sides of the airplane, in accordance with Boeing Alert Service Bulletin 767-54A0094, dated May 22, 1998. Perform the inspection at the time specified in paragraph (a)(1) or (a)(2) of this AD, as applicable.

NOTE 2: The word "damage" as referenced in this AD, is defined as fretting and/or bushing motion.

(1) For airplanes in Groups 1, 3, and 4: Inspect prior to the accumulation of 12,000 total flight cycles, or within 90 days after April 12, 1999 (the effective date of AD 99-07-06, amendment 39-11091), whichever occurs later.

(2) For airplanes in Group 2: Inspect prior to the accumulation of 24,000 total flight cycles, or within 90 days after April 12, 1999, whichever occurs later.

**Follow-On Actions**

(b) If no cracking or damage is detected during the inspection required by paragraph (a) of this AD, repeat the inspection thereafter at the interval specified in paragraph (b)(1) or (b)(2) of this AD, as applicable, in accordance with Boeing Alert Service Bulletin 767-54A0094, dated May 22, 1998. Repeat the inspection until the actions specified by paragraph (d) or (e) of this AD have been accomplished.

(1) For airplanes in Groups 1, 3, and 4; and for airplanes in Group 2 on which the diagonal brace has accumulated more than 32,000 total flight cycles: Repeat the inspection at intervals not to exceed 1,000 flight cycles.

(2) For airplanes in Group 2 on which the diagonal brace has accumulated 32,000 or fewer total flight cycles: Repeat the inspection at intervals not to exceed 3,000 flight cycles.

(c) If any cracking or damage is detected during any inspection required by paragraph (a) or (b) of this AD: Prior to further flight, remove the diagonal brace and perform additional inspections to detect damage of the strut secondary load paths, in accordance with Part 4 of Boeing Alert Service Bulletin 767-54A0094, dated May 22, 1998; and accomplish the requirements of paragraph (c)(1) or (c)(2) of this AD; as applicable.

(1) If any cracking is detected: Prior to further flight, accomplish the requirements of paragraph (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this AD, as applicable.

(i) If one lug on one or both ends of the diagonal brace is fractured (Figure 7 of the alert service bulletin), or if two lugs on either end of the diagonal brace are fractured (Figure 8 of the alert service bulletin), prior to further flight: Rework the forward and aft lugs of the diagonal brace in accordance with the rework limits specified in Part 2 of the Accomplishment Instructions of the alert service bulletin.

(ii) Replace the one-piece diagonal brace with a new three-piece diagonal brace, in accordance with Part 3 of the Accomplishment Instructions of the alert service bulletin. Such replacement constitutes terminating action for the requirements of this AD.

(iii) If any additional damage of the alternate load paths is detected, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative (DER) who has been authorized by the Manager, Seattle ACO, to make such findings.

(2) If any damage is detected: Prior to further flight, repair in accordance with a method approved by the Manager, Seattle ACO; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings.

(d) For airplanes on which no cracking is detected during the inspection required by paragraph (a) of this AD, in lieu of accomplishing repetitive inspections in accordance with paragraph (b) of this AD, rework of the forward and aft lugs of the diagonal brace may be accomplished in accordance with Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 767-54A0094, dated May 22, 1998. If such rework is accomplished: Within 12,000 flight cycles after the rework, repeat the inspection required by paragraph (a) of this AD; and, prior to the accumulation of 37,500 total flight cycles on the diagonal brace, replace the one-piece diagonal brace with a new three-piece diagonal brace, in accordance with Part 3 of the Accomplishment Instructions of the alert service bulletin. Such replacement constitutes terminating action for the requirements of this AD.

**Terminating Action**

(e) Prior to the accumulation of 37,500 total flight cycles, or within 180 days after the effective date of this AD, whichever occurs later: Replace the one-piece diagonal brace with a new three-piece diagonal brace, in accordance with Part 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 767-54A0094, dated May 22, 1998. Such replacement constitutes terminating action for the requirements of this AD.

**Alternative Methods of Compliance**

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

**Special Flight Permits**

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(h) Except as provided by paragraphs (c)(1)(i) and (c)(3) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 767-54A0094, dated May 22, 1998. The incorporation by reference of this service bulletin was approved previously by the Director of the Federal Register as of April 12, 1999 (64 FR 14578, March 26, 1999). Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(i) This amendment becomes effective on May 15, 2000.

**FOR FURTHER INFORMATION CONTACT:**

James G. Rehrl, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2783; fax (425) 227-1181.

Issued in Renton, Washington, on March 31, 2000.

Donald L. Riggins, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**BOEING  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-06 BOEING:** Amendment 39-11660. Docket 99-NM-81-AD.

Applicability: All Model 737-100, -200, -200C, -300, -400, and -500 series airplanes; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracking of the lower corners of the door frame and cross beam of the forward cargo door, which could result in rapid depressurization of the airplane, accomplish the following:

**High Frequency Eddy Current Initial/Repetitive Inspections**

(a) Within 1 year or 4,500 flight cycles after the effective date of this AD, whichever occurs later, perform a high frequency eddy current (HFEC) inspection to detect cracking of the lower corners (forward and aft) of the door frame of the forward cargo door in accordance with Boeing 737 Nondestructive Test Manual, Part 6, Section 51-00-00, Figure 4 or Figure 23.

(1) If no cracking is detected, repeat the HFEC inspection thereafter at intervals not to exceed 4,500 flight cycles, until the requirements of paragraph (c) of this AD have been accomplished.

(2) If any cracking is detected during any inspection required by paragraph (a) of this AD, prior to further flight, accomplish the requirements of paragraphs (a)(2)(i) AND (a)(2)(ii) of this AD, which constitute terminating action for the repetitive inspections required by paragraph (a)(1) of this AD.

(i) Accomplish the requirements of paragraph (a)(2)(i)(A) OR (a)(2)(i)(B) of this AD, and install a cross beam repair and reinforcement modification of the cross beam in accordance with Boeing Service Bulletin 737-52-1100, Revision 2, dated March 31, 1994.

(A) Repair the door frame of the forward cargo door in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative (DER) who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair or modification method to be approved by the Manager, Seattle ACO, as required by this paragraph; and paragraphs (a)(2)(ii), (b)(2), (b)(3)(ii), and (c)(2) of this AD; the Manager's approval letter must specifically reference this AD.

(B) Replace the door frame of the forward cargo door with a new door frame in accordance with Boeing Service Bulletin 737-52-1100, Revision 2, dated March 31, 1994.

(ii) Modify the repaired or replaced door frame of the forward cargo door in accordance with a method approved by the Manager, Seattle ACO, or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings.

**Detailed Visual Initial/Repetitive Inspections**

(b) Within 1 year or 4,500 flight cycles after the effective date of this AD, whichever occurs later, perform a detailed visual inspection to detect cracking of the cross beam (i.e., upper and lower chord and web sections) of the forward cargo door in accordance with Boeing Service Bulletin 737-52-1100, Revision 2, dated March 31, 1994.

NOTE 2: For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation or assembly to detect damage, failure or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc. may be used. Surface cleaning and elaborate access procedures may be required."

(1) If no cracking is detected, repeat the inspection thereafter at intervals not to exceed 4,500 flight cycles until the requirements of paragraph (c) of this AD have been accomplished.

(2) If any cracking is detected on the lower chord section of the cross beam during any inspection required by paragraph (b) of this AD, prior to further flight, repair in accordance with a method approved by the Manager, Seattle ACO, or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings.

(3) If any cracking is detected on any area excluding the lower chord section of the cross beam (i.e., upper chord and web section) during any inspection required by paragraph (b) of this AD, prior to further flight,

accomplish the requirements of paragraph (b)(3)(i) or (b)(3)(ii), as applicable, of this AD, which constitute terminating action for the repetitive inspections required by paragraph (b)(1) of this AD.

(i) For airplanes with line numbers 1 through 1231: Install a cross beam repair and preventative modification of the outboard radius of the lower corners (forward and aft) of the door frame in accordance with Boeing Service Bulletin 737-52-1100, Revision 2, dated March 31, 1994.

NOTE 3: Due to implications and consequences associated with cracking, this AD does not allow the option of replacing the door frame as an alternative method of compliance to installing the preventative modification.

(ii) For airplanes with line numbers 1232 and subsequent: Install a cross beam repair and preventative modification of the outboard radius of the lower corners (forward and aft) of the door frame in accordance with a method approved by the Manager, Seattle ACO or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings.

#### **Terminating Action**

(c) Within 4 years or 12,000 flight cycles after the effective date of this AD, whichever occurs later: Install the preventative modification of the outboard radius of the lower corners (forward and aft) of the door frame and the reinforcement modification of the cross beam of the forward cargo door in accordance with paragraph (c)(1) or (c)(2) of this AD, as applicable. Accomplishment of paragraph (c)(1) or (c)(2) of this AD, as applicable, constitutes terminating action for the repetitive inspections required by paragraphs (a)(1) and (b)(1) of this AD.

(1) For airplanes with line numbers 1 through 1231: Accomplish the preventative modification and the reinforcement modification in accordance with Boeing Service Bulletin 737-52-1100, Revision 2, dated March 31, 1994.

(2) For airplanes with line numbers 1232 and subsequent: Accomplish the preventative modification and the reinforcement modification in accordance with a method approved by the Manager, Seattle ACO or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings.

#### **Modifications Previously Accomplished**

(d) For all airplanes on which modifications of the forward lower corner of the door frame and the cross beam of the forward cargo door were accomplished in accordance with Boeing Service Bulletin 737-52-1100, dated August 25, 1988, or Revision 1, dated July 20, 1989, or in accordance with the requirements of AD 90-06-02, amendment 39-6489: Within 4 years or 12,000 flight cycles after the effective date of this AD, whichever occurs later, install the reinforcement modification of the aft corner of the door frame of the forward cargo door in accordance with Boeing Service Bulletin 737-52-1100, Revision 2, dated March 31, 1994. Accomplishment of such modification constitutes terminating action for the repetitive inspections required by this AD.

NOTE 4: Accomplishment of Boeing Service Bulletin 737-52-1100, Revision 2, dated March 31, 1994, does not supersede the requirements of AD 90-06-02, amendment 39-6489.

#### **Alternative Methods of Compliance**

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

#### **Special Flight Permits**

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

#### **Incorporation by Reference**

(g) Except as provided by paragraphs (a)(2)(i)(A), (a)(2)(ii), (b)(2), (b)(3)(ii), and (c)(2) of this AD; the actions shall be done in accordance with Boeing Service Bulletin 737-52-1100, Revision 2, dated March 31, 1994; and Boeing 737 Nondestructive Test (NDT) Manual, D6-37239, Part 6, Section 51-00-00, Figure 4 or Figure 23, dated August 5, 1997; as applicable. Boeing 737 NDT Manual contains the following list of effective pages:

Page Number	Revision Level Shown on Page	Date Shown on Page
Title Page	Not Shown	Not Shown
List of Effective Pages	Not Shown	August 5, 1997
Pages 1, 2		
List of Effective Pages	Not Shown	February 5, 1997
Page 2A		



2000-07-06

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98134-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on May 16, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Nenita Odesa, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2557; fax (425) 227-1181.

Issued in Renton, Washington, on March 31, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**AIRBUS INDUSTRIE  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-07 AIRBUS INDUSTRIE:** Amendment 39-11661. Docket 99-NM-205-AD.

Applicability: Model A300 series airplanes, as listed in Airbus Service Bulletin A300-53-0298, Revision 03, dated November 26, 1998; certificated in any category; except those on which Airbus Service Bulletin A300-53-0282 or Airbus Service Bulletin A300-53-0291 has been accomplished.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent reduced structural integrity of the wing center box angle fittings at frame (FR) 47, accomplish the following:

(a) Prior to the accumulation of the applicable threshold specified in the "MANDATORY TH" column of the table in paragraph 1.B.(4) of the service bulletin, or within 6,500 flight cycles after the effective date of this AD, whichever occurs later: Except as required by paragraph (b) of this AD, modify the wing center box angle fittings at FR 47 (including removing certain sealant and fasteners, performing rotating probe inspections to detect cracking, cold working certain fastener holes, installing new fasteners and sealant, and repairing damage), in accordance with Airbus Service Bulletin A300-53-0298, Revision 03, dated November 26, 1998.

NOTE 2: Operators should note that the area required to be modified by paragraph (a) of this AD remains subject to the requirements of AD 96-13-11, amendment 39-9679, after modification.

(b) Where Airbus Service Bulletin A300-53-0298, Revision 03, dated November 26, 1998, specifies that Airbus be contacted for repair instructions for certain damage conditions, this AD requires that such damage conditions be repaired prior to further flight in accordance with a method approved by either the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate; or the Direction Générale de l'Aviation Civile (DGAC) (or its delegated agent). For a repair method to be approved by the Manager, International Branch, ANM-116, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

**Alternative Methods of Compliance**

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

**Special Flight Permits**

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(e) Except as provided by paragraph (b) of this AD, the modification shall be done in accordance with Airbus Service Bulletin A300-53-0298, Revision 03, dated November 26, 1998, which contains the following list of effective pages:

Page Number	Revision Level Shown on Page	Date Shown on Page
1-21, 32-40, 42-46, 67, 68, 71-74, 93, 94, 103-110, 151, 157-161, 205-214	03	November 26, 1998
22-31, 41, 47-55, 57-66, 69, 70, 75-92, 95-102, 152-156, 163-204, 215	Original	October 14, 1993
56, 102A, 102B, 111-150	1	March 17, 1994

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind

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Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in French airworthiness directive 1999-076-267(B), dated February 24, 1999.

(f) This amendment becomes effective on May 16, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on March 31, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**BOEING  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-08 BOEING:** Amendment 39-11662. Docket 99-NM-232-AD.

Applicability: Model 777 series airplanes, line numbers 2 through 103 inclusive, 105 through 119 inclusive, 121 through 161 inclusive, 163 through 177 inclusive, and 179 through 186 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent broken tie rods, which could result in the center stowage bins dropping onto the passenger seats below, causing possible injury to the occupants, accomplish the following:

**Replacement**

(a) Within 4 years after the effective date of this AD, replace the aluminum clevis ends on the tie rods for the center stowage bin supports with new steel clevis ends, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-25-0120, Revision 1, dated March 16, 2000.

NOTE 2: Accomplishment of the replacement of clevis ends with new steel clevis ends prior to the effective date of this AD in accordance with Boeing Service Bulletin 777-25-0120, dated February 11, 1999, is acceptable for compliance with paragraph (a) of this AD.

**Alternative Methods of Compliance**

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

**Special Flight Permits**

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(d) The replacement shall be done in accordance with Boeing Service Bulletin 777-25-0120, Revision 1, dated March 16, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**Effective Date**

(e) This amendment becomes effective on May 16, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Julie Alger, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue S.W., Renton, Washington 98055-4056; telephone (425) 227-2779; fax (425) 227-1181.

Issued in Renton, Washington, on March 31, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**BOEING  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-10 BOEING:** Amendment 39-11664. Docket 2000-NM-87-AD.

Applicability: Model 747-200B, -300 series airplanes equipped with General Electric (GE) CF6-80C2 series engines, and Model 747-400, 747-400D, and 747-400F series airplanes equipped with General Electric (GE) CF6-80C2 series engines or Pratt & Whitney PW4000 series engines; line numbers (L/N) 679 through 1061 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct cracked fire extinguishing tubes in the engine struts, which, in the event of an engine fire, could reduce the amount of fire extinguishing agent that can be delivered to the engine, and result in a fire spreading from the engine to the wing of the airplane, accomplish the following:

**Repetitive Inspections and Corrective Actions**

(a) Within 30 days after the effective date of this AD, perform a detailed visual inspection to detect cracking of the fire extinguisher discharge tubes in the number 2 and number 3 engine struts, in accordance with Boeing Alert Service Bulletin 747-26A2266, dated March 3, 2000.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) If no cracking is detected, repeat the inspection thereafter at intervals not to exceed 18 months.

(2) If any cracking is detected, prior to further flight, replace the cracked tube with a new or serviceable part, in accordance with Boeing Alert Service Bulletin 747-26A2266, dated March 3, 2000. Repeat the inspection required by paragraph (a) of this AD within 18 months after the replacement and thereafter at intervals not to exceed 18 months.

**Optional Terminating Action**

(b) For Model 747-400 series airplanes, L/N 696 through 1061 inclusive, equipped with Pratt & Whitney PW4000 series engines: Modification of the fire extinguisher discharge tubes in the number 2 and number 3 struts, in accordance with Boeing Service Bulletin 747-26-2233, dated May 11, 1995, constitutes terminating action for the repetitive inspection requirements of this AD.

**Alternative Methods of Compliance**

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

**Special Flight Permits**

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(e) The inspections and replacement shall be done in accordance with Boeing Alert Service Bulletin 747-26A2266, dated March 3, 2000. If accomplished, the optional terminating action shall be accomplished in accordance with Boeing Service Bulletin 747-26-2233, dated May 11, 1995. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**Effective Date**

(f) This amendment becomes effective on April 25, 2000.

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FOR FURTHER INFORMATION CONTACT:

Sulmo Mariano, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2686; fax (425) 227-1181.

Issued in Renton, Washington, on March 30, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**INDUSTRIE AERONATICHE E MECCANICHE  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-11 INDUSTRIE AERONAUTICHE E MECCANICHE:** Amendment 39-11665; Docket No. 99-CE 65 AD.

Applicability: Model Piaggio P-180 airplanes, all serial numbers, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated in the body of this AD, unless already accomplished.

To prevent the brake hydraulic fluid from leaking because of the brake assembly rods contacting the brake valve tubing, which could result in the inability to adequately stop the airplane during ground operations, accomplish the following:

(a) Within the next 150 hours time-in-service (TIS) after the effective date of this AD, and thereafter at intervals not to exceed 150 hours TIS, inspect the brake system assembly for wear or damage. Accomplish the inspection in accordance with the Accomplishment Instructions in Piaggio Service Bulletin (Mandatory) No.: SB-80-0107, Original Issue: April 30, 1999.

(b) If any worn or damaged parts are found during any inspection required by this AD, prior to further flight, replace the parts in accordance with the appropriate maintenance manual. The repetitive inspections required by paragraph (a) of this AD still apply after replacing any worn or damaged parts.

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(d) An alternative method of compliance or adjustment of the initial or repetitive compliance times that provides an equivalent level of safety may be approved by the Manager, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106. The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Small Airplane Directorate.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Small Airplane Directorate.

(e) Questions or technical information related to Piaggio Service Bulletin (Mandatory) No.: SB-80-0107, Original Issue: April 30, 1999, should be directed to I.A.M. Rinaldo Piaggio S.p.A., Via Cibrario, 4 16154 Genoa, Italy. This service information may be examined at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri 64106.

(f) The inspections required by this AD shall be done in accordance with Piaggio Service Bulletin (Mandatory) No.: SB-80-0107, Original Issue: April 30, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from I.A.M. Rinaldo Piaggio S.p.A., Via Cibrario, 4 16154 Genoa, Italy. Copies may be inspected at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in Italian AD 99-219, dated June 22, 1999.

(g) This amendment becomes effective on May 29, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Mr. Randy Griffith, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4126; facsimile: (816) 329-4091.

Issued in Kansas City, Missouri, on March 29, 2000.

Brian A. Hancock, Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

**BOEING  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-13 BOEING:** Amendment 39-11667. Docket 99-NM-57-AD.

Applicability: Model 757-200 and -200PF series airplanes, line numbers 1 through 806 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent corroded fuse pins, which could result in the main landing gear (MLG) separating from the wing, and consequent damage to the airplane and possible rupture of the wing fuel tank, accomplish the following:

**Repetitive Inspections**

(a) Perform a detailed visual inspection to detect loose fuse pins in the outboard beam attachment and forward trunnion support on the MLG and to detect corrosion on the structure adjacent to the fuse pin, in accordance with Boeing Alert Service Bulletin 757-57A0054, including Appendix A, dated November 5, 1998, or Boeing Service Bulletin 757-57A0054, Revision 1, including Appendix A, dated December 16, 1999; at the later of the times specified in paragraphs (a)(1) and (a)(2) of this AD. Thereafter, repeat the inspection at intervals not to exceed 3,000 flight cycles or 24 months, whichever occurs first, until accomplishment of paragraph (d) of this AD.

(1) Prior to 4 years since date of manufacture of the airplane; or

(2) Within 3,000 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(b) For airplanes on which the alloy steel fuse pins were replaced prior to the effective date of this AD: Perform the initial inspection required by paragraph (a) of this AD within 4 years or 6,000 flight cycles after installation of the pins, whichever occurs later. Thereafter, accomplish the repetitive inspections required by paragraph (a) of this AD at the time specified in that paragraph.

**Corrective Action**

(c) If any loose fuse pin or corrosion on the structure adjacent to the fuse pin is detected during any inspection required by paragraph (a) of this AD, prior to further flight, perform the applicable corrective action [i.e., detailed visual inspections for cracks or corrosion, repair of discrepant parts, and replacement of fuse pin] in accordance with Boeing Alert Service Bulletin 757-57A0054, including Appendix A, dated November 5, 1998, or Boeing Service Bulletin 757-57A0054, Revision 1, including Appendix A, dated December 16, 1999. Replacement of an alloy steel fuse pin with a new corrosion resistant steel (CRES) fuse pin constitutes terminating action for the repetitive inspection requirements of paragraph (a) of this AD for that fuse pin only.

**Terminating Action**

(d) At the next scheduled MLG overhaul, or within 12 years after the effective date of this AD, whichever occurs first, replace all alloy steel fuse pins with new CRES fuse pins in the outboard beam attachment and forward trunnion support on the MLG in accordance with Boeing Alert Service Bulletin 757-57A0054, including Appendix A, dated November 5, 1998, or Boeing Service Bulletin 757-57A0054, Revision 1, including Appendix A, dated December 16, 1999. Accomplishment of the action specified in this paragraph constitutes terminating action for the repetitive inspection requirements of this AD.

**Alternative Methods of Compliance**

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.



**Special Flight Permits**

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(g) The actions shall be done in accordance with Boeing Alert Service Bulletin 757-57A0054, including Appendix A, dated November 5, 1998, or Boeing Service Bulletin 757-57A0054, Revision 1, including Appendix A, dated December 16, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on May 16, 2000.

**FOR FURTHER INFORMATION CONTACT:**

James G. Rehrl, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2783; fax (425) 227-1181.

Issued in Renton, Washington, on April 3, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**MCDONNELL DOUGLAS  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-14 MCDONNELL DOUGLAS:** Amendment 39-11668. Docket 99-NM-263-AD.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin MD11 24A152, dated August 9, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent chafing of the passenger seat wire assembly against a bracket at the lower sidewall panel due to insufficient clearance between the bracket and seat wire assembly, which could result in arcing damage to the passenger seat wire assembly and consequent smoke and fire in the main cabin, accomplish the following:

**Inspection, Installation, and Repair, If Necessary**

(a) Within 6 months after the effective date of this AD, perform a detailed visual inspection of the passenger seat wire assembly to detect chafed or damaged wires, and install protective sleeving, in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A152, dated August 9, 1999. If any chafed or damaged wire is found, prior to further flight, repair in accordance with the service bulletin.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

**Alternative Methods of Compliance**

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

**Special Flight Permits**

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(d) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11 24A152, dated August 9, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on May 19, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on April 4, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**MCDONNELL DOUGLAS  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-15 MCDONNELL DOUGLAS:** Amendment 39-11669. Docket 99-NM-264-AD.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Service Bulletin MD11-23-082, dated August 17, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent a disparity between the ratings of certain circuit breakers and their associated electrical connector contacts, which could damage the electrical connector contacts and possible arcing and heat damage to the electrical connector, accomplish the following:

**Inspection, Installation, and Repair, If Necessary**

(a) Within 1 year after the effective date of this AD, perform a detailed visual inspection of certain electrical connections to detect corrosion, and install new circuit breakers and associated electrical wiring (including modification of a certain nameplate), in accordance with McDonnell Douglas Service Bulletin MD11-23-082, dated August 17, 1999. If any corrosion is detected, prior to further flight, repair in accordance with the service bulletin.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

**Alternative Methods of Compliance**

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

**Special Flight Permits**

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(d) The actions shall be done in accordance with McDonnell Douglas Service Bulletin MD11-23-082, dated August 17, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on May 19, 2000.

FOR FURTHER INFORMATION CONTACT: Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on April 4, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**MCDONNELL DOUGLAS  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-16 MCDONNELL DOUGLAS:** Amendment 39-11670. Docket 99-NM-265-AD. Supersedes AD 94-11-06, Amendment 39-8922.

Applicability: Model MD-11 and MD-11F series airplanes, as listed in McDonnell Douglas Service Bulletin 24-78, dated May 10, 1994; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent arcing from occurring under the forward cargo compartment floor as a result of damaged external power feeder cables, a situation that could lead to a fire at this location, accomplish the following:

**RESTATEMENT OF REQUIREMENTS OF AD 94-11-06, AMENDMENT 39-8922**

**Modification**

(a) Within 90 days after June 15, 1994 (the effective date of AD 94-11-06, amendment 39-8922), modify the external power feeder cable clamping installation in accordance with McDonnell Douglas Service Bulletin 24-78, dated May 10, 1994, or McDonnell Douglas Alert Service Bulletin MD11-24A078, Revision 01, dated June 16, 1999.

**NEW REQUIREMENTS OF THIS AD**

**Inspection**

(b) Within 1 year after the effective date of this AD, perform a detailed visual inspection of the external power cables between stations Y=635.000 and Y=655.000 to detect chafed or damaged wires, in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A078, Revision 01, dated June 16, 1999. If any chafed or damaged wire is found, prior to further flight, repair in accordance with the service bulletin.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

**Alternative Methods of Compliance**

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

**Special Flight Permits**

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(e) The actions shall be done in accordance with McDonnell Douglas Service Bulletin 24-78, dated May 10, 1994, and McDonnell Douglas Alert Service Bulletin MD11-24A078, Revision 01, dated June 16, 1999.

(1) The incorporation by reference of McDonnell Douglas Alert Service Bulletin MD11-24A078, Revision 01, dated June 16, 1999 is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of McDonnell Douglas Service Bulletin 24-78, dated May 10, 1994 was approved previously by the Director of the Federal Register as of June 15, 1994 (59 FR 27972, May 31, 1994).

(3) Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on May 19, 2000.

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FOR FURTHER INFORMATION CONTACT:

Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on April 4, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**MCDONNELL DOUGLAS  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-18 MCDONNELL DOUGLAS:** Amendment 39-11672. Docket 99-NM-267-AD.

Applicability: Model MD-11 and MD-11F series airplanes, as listed in McDonnell Douglas Alert Service Bulletin MD11-24A172, dated September 8, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent chafed and burnt generator power feeder wires, which could result in arcing damage to a certain closeout rib of the wing leading edge and fire damage to the wing structure, and consequent reduced structural integrity of the wing, accomplish the following:

**Inspection; Repair, If Necessary; and Modification**

(a) Within 6 months after the effective date of this AD, perform a detailed visual inspection of the generator power feeder wires to detect chafed or damaged wires, and modify the generator power feeder wire installation in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A172, dated September 8, 1999. If any chafed or damaged wire is found, prior to further flight, repair in accordance with the service bulletin.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

**Alternative Methods of Compliance**

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

**Special Flight Permits**

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(d) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A172, dated September 8, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on May 19, 2000.

FOR FURTHER INFORMATION CONTACT: Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on April 4, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**MCDONNELL DOUGLAS  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-20 MCDONNELL DOUGLAS:** Amendment 39-11674. Docket 99-NM-269-AD.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin MD11-24A040, Revision 01, dated October 11, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent arcing and overheating of terminals and consequent smoke and fire in the forward cargo compartment due to improper bonding of ground studs in the forward cargo compartment and in the electrical power center (EPC) and due to improper installation of circuit breaker terminations, accomplish the following:

**Resistance Check and Corrective Actions**

(a) Within 12 months after the effective date of this AD, accomplish the actions specified in paragraphs (a)(1) and (a)(2) of this AD, in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A040, Revision 01, dated October 11, 1999.

(1) Perform an electrical resistance measurement of the ground studs of the No. 2 generator in the electrical power center of the center accessory compartment for proper electrical bonding, in accordance with the service bulletin.

(i) If all ground studs are electrically bonded properly, prior to further flight, tighten applicable fasteners, if necessary, in accordance with the service bulletin.

(ii) If any ground stud is not electrically bonded properly, prior to further flight, electrically bond the ground stud in accordance with the service bulletin.

(2) Perform an electrical resistance measurement of the ground studs and circuit breaker terminations in the forward cargo compartment to detect looseness and for proper electrical bonding, in accordance with the service bulletin.

(i) If all ground studs are electrically bonded properly, prior to further flight, tighten applicable attaching parts in accordance with the service bulletin.

(ii) If any circuit breaker termination is found loose, tighten in accordance with the service bulletin.

(iii) If any ground stud is not electrically bonded properly, prior to further flight, electrically bond the ground stud in accordance with the service bulletin.

**Alternative Methods of Compliance**

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

**Special Flight Permits**

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(d) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A040, Revision 01, dated October 11, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard,

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Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on May 19, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on April 4, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.



**MCDONNELL DOUGLAS  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-21 MCDONNELL DOUGLAS:** Amendment 39-11675. Docket 99-NM-270-AD.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin MD11-24A116, Revision 01, dated October 11, 1999; except for those airplanes on which the modification specified in McDonnell Douglas Service Bulletin MD11-24-116, dated May 14, 1997, has been accomplished; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent wire chafing of the control panel of the auxiliary power unit (APU) and resultant arcing due to insufficient clearance between the wire bundles and the airplane structure, which could result in smoke and fire in the flight deck, accomplish the following:

**Inspection**

(a) Within 12 months after the effective date of this AD, perform a general visual inspection of wiring behind the control panel of the APU to detect chafing, in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A116, Revision 01, dated October 11, 1999.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(1) If no chafing is found, prior to further flight, accomplish the requirements of paragraph (b) of this AD.

(2) If any chafing is found, prior to further flight, repair in accordance with the service bulletin and accomplish the requirements of paragraph (b) of this AD.

**Modification**

(b) Modify the wiring behind the APU control panel (i.e., install sleeving and fiber tying tape over wires) in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A116, Revision 01, dated October 11, 1999.

**Alternative Methods of Compliance**

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

**Special Flight Permits**

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(e) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A116, Revision 01, dated October 11, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on May 19, 2000.

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FOR FURTHER INFORMATION CONTACT:

Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on April 4, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**AIRBUS INDUSTRIE  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-22 AIRBUS INDUSTRIE:** Amendment 39-11676. Docket 98-NM-78-AD.

Applicability: Model A300-600 series airplanes, on which Airbus Modification 11044 or Airbus Modification 11045 (reference Airbus Service Bulletin A300-53-6063, dated December 12, 1996) has not been accomplished, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking of the doubler angle and discrepancies of the fasteners that connect the doubler angle and the bottom panel of the center wing box, which could result in reduced structural integrity of the airplane, accomplish the following:

**Inspections**

(a) Perform a detailed visual inspection to detect cracking of the doubler angle, and a detailed external visual inspection to detect discrepancies of the fasteners that connect the doubler angle and the bottom panel of the center wing box, on the left and right sides of the airplane, in accordance with Airbus Service Bulletin A300-53-6110, Revision 01, dated December 10, 1998, at the time specified in paragraph (a)(1) or (a)(2) of this AD, as applicable. Thereafter, repeat the inspections of the doubler angle and fasteners at intervals not to exceed 2,400 flight cycles.

(1) For airplanes on which a detailed visual inspection has been performed within the last 2,400 flight cycles prior to the effective date of this AD, in accordance with Structural Significant Item (SSI) 57-10-19 of the Airbus A300-600 Maintenance Review Board (MRB) Document: Inspect within 2,400 flight cycles after the most recent SSI inspection.

(2) For airplanes on which a detailed visual inspection has not been performed within the last 2,400 flight cycles prior to the effective date of this AD, in accordance with Structural Significant Item (SSI) 57-10-19 of the Airbus A300-600 Maintenance Review Board (MRB) Document: Inspect at the time specified in paragraph (a)(2)(i), (a)(2)(ii), or (a)(2)(iii), as applicable.

(i) For airplanes that have accumulated 6,600 or more total flight cycles as of the effective date of this AD: Inspect within 750 flight cycles after the effective date of this AD.

(ii) For airplanes that have accumulated more than 3,100 total flight cycles, but less than 6,600 total flight cycles as of the effective date of this AD: Inspect within 1,500 flight cycles after the effective date of this AD.

(iii) For airplanes that have accumulated 3,100 total flight cycles or less as of the effective date of this AD: Inspect prior to the accumulation of 4,600 total flight cycles.

NOTE 2: Accomplishment of inspections or corrective actions prior to the effective date of this AD, in accordance with Airbus Service Bulletin A300-53-6110, dated April 8, 1997, is acceptable for initial compliance with the applicable paragraph of this AD.

NOTE 3: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

**Corrective Actions**

(b) If any discrepancy is found in a fastener that connects the doubler angle and the bottom panel of the center wing box during any detailed external visual inspection performed in accordance with paragraph (a) of this AD: Prior to further flight, remove the discrepant fastener, and perform a rotating probe inspection to detect discrepancies of the fastener holes, in accordance with Airbus Service Bulletin A300-53-6110, Revision 01, dated December 10, 1998.

(1) If no discrepancy is found in any fastener hole, prior to further flight, install a new fastener, in accordance with the service bulletin. Thereafter, repeat the inspections required by paragraph (a) of this AD at intervals not to exceed 2,400 flight cycles.

(2) If any discrepancy is found in any fastener hole, prior to further flight, except as provided by paragraph (e) of this AD, repair in accordance with the service bulletin, and accomplish the actions required by paragraph (c) of this AD.

(c) If any crack is found in the doubler angle during any detailed visual inspection performed in accordance with paragraph (a) of this AD, accomplish paragraph (c)(1) or (c)(2), as applicable, at the time specified in that paragraph.

(1) If the cracking is within the limits specified in Figure 1, Sheet 1, of Airbus Service Bulletin A300-53-6110, Revision 01, dated December 10, 1998: Except as required by paragraph (e) of the AD, accomplish the applicable corrective actions (e.g., crack stopping of hole, rotating probe inspection, repetitive detailed visual inspections, eventual modification of doubler angle) specified in Figure 1, Sheet 1; at the times and in accordance with the procedures specified in the service bulletin.

(2) If the cracking is outside the limits specified in Figure 1, Sheet 1 [i.e., 1.181 inches (30 millimeters) or more in length]: Prior to further flight, modify the doubler angle in accordance with Airbus Service Bulletin A300-53-6063, dated December 12, 1996. Accomplishment of the modification constitutes terminating action for the repetitive inspection requirements of this AD.

#### **Optional Terminating Modification**

(d) Accomplishment of the modification in accordance with Airbus Service Bulletin A300-53-6063, dated December 12, 1996, constitutes terminating action for the repetitive inspection requirements of this AD.

#### **Approved Repairs**

(e) If any discrepancy is found during any inspection required by this AD, and the service bulletin specifies to contact Airbus for appropriate action: Prior to further flight, repair in accordance with a method approved by either the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, or the Direction Générale de l'Aviation Civile (DGAC) (or its delegated agent). For a repair method to be approved by the Manager, International Branch, ANM 116, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

#### **Alternative Methods of Compliance**

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

#### **Special Flight Permits**

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

#### **Incorporation By Reference**

(h) Except as required by paragraph (e) of this AD, the actions shall be done in accordance with Airbus Service Bulletin A300-53-6110, Revision 01, dated December 10, 1998, or Airbus Service Bulletin A300-53-6063, dated December 12, 1996; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 5: The subject of this AD is addressed in French airworthiness directive 97-383-240(B), dated December 17, 1997.

(i) This amendment becomes effective on May 19, 2000.

#### **FOR FURTHER INFORMATION CONTACT:**

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on April 5, 2000.

Donald L. Riggins, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**BOMBARDIER, INC.  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-23 BOMBARDIER, INC.** (Formerly de Havilland, Inc.): Amendment 39-11678. Docket 99-NM-321-AD.

Applicability: Model DHC-8-100 series airplanes, serial numbers 003 through 020 inclusive; certificated in any category; except those on which Modification 8/0198 has been installed.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent a failure of the thunderstorm lights in the cockpit after loss of all generated electrical power, which could result in the cockpit instruments not being visible to the flight crew during certain emergency procedures, and consequent reduced controllability of the airplane, accomplish the following:

**Modification**

(a) Within 6 months after the effective date of this AD, accomplish Bombardier Modification 8/0198 (including changing the power supply for the thunderstorm lights from the left secondary bus to the left essential bus) in accordance with Bombardier Service Bulletin S.B. 8-24-69, Revision 'A', dated June 11, 1999.

**Alternative Methods of Compliance**

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York Aircraft Certification Office (ACO), FAA, Engine and Propeller Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, New York ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the New York ACO.

**Special Flight Permits**

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(d) The modification shall be done in accordance with Bombardier Service Bulletin S.B. 8-24-69, Revision 'A', dated June 11, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA Engine and Propeller Directorate, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in Canadian airworthiness directive CF-99-21, dated July 22, 1999.

(e) This amendment becomes effective on May 19, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Luciano Castracane, Aerospace Engineer, Airframe and Propulsion Branch, ANE-171, FAA, Engine and Propeller Directorate, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York 11581; telephone (516) 256-7535; fax (516) 568-2716.

Issued in Renton, Washington, on April 5, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**FOKKER SERVICES B.V.  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-24 FOKKER SERVICES B.V.:** Amendment 39-11679. Docket 99-NM-369-AD.

Applicability: All Model F.28 Mark 0070 and 0100 airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure adequate electrical bonding between the horizontal and vertical stabilizers, accomplish the following:

(a) Within 18 months after the effective date of this AD, accomplish the actions required by paragraphs (a)(1) and (a)(2) of this AD, in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-23-032, dated September 22, 1999.

(1) On the left-hand side of the horizontal stabilizer, replace the existing bonding jumper on the horizontal stabilizer torsion box with a new, improved bonding jumper.

(2) On the right-hand side of the horizontal stabilizer, install a new, improved bonding jumper.

NOTE 2: Fokker Service Bulletin SBF100-23-032, dated September 22, 1999, references Fokker 70/100 Aircraft Maintenance Manual (AMM), Chapter 20-13-05, as an additional source of service information to accomplish the installation of the new bonding jumpers.

**Alternative Methods of Compliance**

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

**Special Flight Permits**

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(d) The actions shall be done in accordance with Fokker Service Bulletin SBF100-23-032, dated September 22, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Fokker Services B.V., P.O. Box 231, 2150 AE Nieuw-Vennep, the Netherlands. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC. NOTE 4: The subject of this AD is addressed in Dutch airworthiness directive 1999-128(A), dated October 29, 1999.

(e) This amendment becomes effective on May 19, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on April 5, 2000.

Donald L. Riggins, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**GULFSTREAM AEROSPACE CORPORATION  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-25 GULFSTREAM AEROSPACE CORPORATION:** Amendment 39-11680. Docket 2000-NM-82-AD.

Applicability: Model G-IV series airplanes, serial numbers 1000 through 1404 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent interference and chafing between the alternator power feeder cables and adjacent structure, which could result in an electrical short circuit and consequent fire ignition source in the engine compartment, accomplish the following:

**Modification**

(a) Within 150 total flight hours after the effective date of this AD, accomplish paragraphs (a)(1) or (a)(2) of this AD, as applicable, in accordance with Gulfstream IV Customer Bulletin No. 112, dated February 15, 2000, and Gulfstream IV Aircraft Service Change No. 410, dated February 11, 2000.

(1) For airplanes having serial numbers 1000 through 1384 inclusive: Accomplish paragraphs (a)(1)(i) and (a)(1)(ii) of this AD for the left and right engines, in accordance with Paragraphs B. and C. of the Modification Instructions of the aircraft service change.

- (i) Replace the alternator power feeder cables with new cables, and reroute the cables.
- (ii) Install additional brackets and clamps.

NOTE 2: On some airplanes, some of the actions described in the aircraft service change were accomplished prior to the effective date of this AD. On these airplanes, these actions are not required to be repeated, as allowed by the phrase, "unless accomplished previously." However, any action described in the aircraft service change that has not been accomplished on these airplanes must be accomplished in accordance with this paragraph.

(2) For airplanes having serial numbers 1385 through 1404 inclusive: Accomplish paragraphs (a)(2)(i) and (a)(2)(ii) on the right engine in accordance with paragraph D. of the Modification Instructions of the aircraft service change.

- (i) Install a bracket and spacer.
- (ii) Reroute the alternator power feeder cables.

**Alternative Methods of Compliance**

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA, Small Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

**Special Flight Permits**

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(d) The actions shall be done in accordance with Gulfstream IV Customer Bulletin No. 112, dated February 15, 2000; and Gulfstream IV Aircraft Service Change No. 410, dated February 11, 2000, as applicable. (NOTE: The issue date of Gulfstream IV Aircraft Service Change No. 410 is indicated only on the cover page of the document; no other page of this document is dated.) This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Gulfstream Aerospace Corporation, P.O. Box 2206, M/S D-10, Savannah, Georgia 31402-9980. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Small Airplane Directorate, Atlanta Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on May 1, 2000.

2000-07-25

FOR FURTHER INFORMATION CONTACT:

Neil Berryman, Aerospace Engineer; ACE-118A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703-6098; fax (770) 703-6097.

Issued in Renton, Washington, on April 5, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.



**TRANSPORT CATEGORY AIRPLANES  
AIRWORTHINESS DIRECTIVE  
APPLIANCE  
LARGE AIRCRAFT**

**2000-07-27 TRANSPORT CATEGORY AIRPLANES:** Amendment 39-11683. Docket 2000-NM-83-AD.

Applicability: Transport category airplanes including but not limited to those listed below, certificated in any category; equipped with any Honeywell air data inertial reference unit (ADIRU) having a serial number below 0841 and a part number (P/N) listed below:

<u>Airplane manufacturer</u>	<u>Model</u>	<u>ADIRU P/N</u>
Boeing	757-300	HG2050AC02
	737-600	HG2050AC03
	737-700	HG2050AC04
	737-800	HG2050AC05
Airbus	A319-111, A319-112, A319-113, A319-114, A319-131, A319-132, A320-111, A320-211, A320-212, A320-214, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A330-202, A330-301, A330-223, A330-321, A330-322, A330-323, A340-211, A340-311, A340-212, A340-312, A340-213, A340-313	HG2030AD09
Airbus	A330-202, A330-301, A330-223, A330-321, A330-322, A330-323, A340-211, A340-311, A340-212, A340-312, A340-213, A340-313	HG2030AD10

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent loss of the main sources of attitude data, consequent high pilot workload, and a significant increase in the likelihood of pilot error, accomplish the following:

**Inspection and Replacement**

(a) Prior to the next flight following any critical inertial reference failure of an ADIRU: Inspect the identification plate of the ADIRU to determine its modification status, in accordance with Honeywell Alert Service Bulletin HG2030AD-34-A0009 (for an ADIRU having P/N HG2030AD09 or HG2030AD10) or HG2050AC-34-A0008 (for an ADIRU having P/N HG2050AC02, HG2050AC03, HG2050AC04, or HG2050AC05), both dated March 9, 2000; as applicable.

(1) If any ADIRU having P/N HG2050AC02, HG2050AC03, HG2050AC04, or HG2050AC05 is not marked as modification 2 or 3: Prior to further flight, replace the ADIRU with an ADIRU as specified in either paragraph (a)(1)(i) or (a)(1)(ii) of this AD, in accordance with Honeywell Alert Service Bulletin HG2050AC-34-A0008, dated March 9, 2000.

(i) Replace with an ADIRU that has P/N HG2050AC03, HG2050AC04, or HG2050AC05; and that is marked as modification 2 or 3. Or

(ii) Replace with a serviceable ADIRU that has P/N HG2050AC03, HG2050AC04, or HG2050AC05; and that is not marked as modification 2 or 3; and that has been determined to have accumulated less than 7,000 operating hours in accordance with the alert service bulletin.

(2) If any ADIRU having P/N HG2030AD09 or HG2030AD10 is not marked with modification 3 or 6: Prior to further flight, replace the ADIRU with an ADIRU as specified in either paragraph (a)(2)(i) or (a)(2)(ii), in accordance with Honeywell Alert Service Bulletin HG2030AD-34-A0009, dated March 9, 2000.

(i) Replace with an ADIRU having P/N HG2030AD09 or HG2030AD10 that is marked as modification 3 or 6; or

(ii) Replace with a serviceable ADIRU having P/N HG2030AD09 or HG2030AD10 that is not marked as modification 3 or 6, and that has been determined to have accumulated less than 7,000 operating hours in accordance with the alert service bulletin.

NOTE 2: For purposes of this AD, a "serviceable" ADIRU is one that satisfies the replacement requirements of paragraph (a)(1)(ii) or (a)(2)(ii), and on which no critical inertial reference failure has occurred.

(b) Installation of all ADIRUs on the airplane that meet the criteria of paragraph (b)(1) or (b)(2) of this AD constitutes terminating action for the requirements of this AD:

(1) ADIRUs that have P/N HG2050AC03, HG2050AC04, or HG2050AC05; and that are marked as modification 2 or 3; or

(2) ADIRUs that have P/N HG2030AD09 or HG2030AD10, and that are marked as modification 3 or 6.

#### **Alternative Methods of Compliance**

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Chicago Aircraft Certification Office (ACO), FAA, Small Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Chicago ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Chicago ACO.

#### **Special Flight Permits**

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished, provided that the remaining, functioning ADIRU(s) has accumulated less than 7,000 total operating hours, as specified by Honeywell Alert Service Bulletin HG2030AD-34-A0009 (for ADIRU P/N's HG2030AD09 and HG2030AD10) or HG2050AC-34-A0008 (for an ADIRU P/N HG2050AC), both dated March 9, 2000; as applicable.

#### **Incorporation by Reference**

(e) The actions shall be done in accordance with Honeywell Alert Service Bulletin HG2050AC-34-A0008, dated March 9, 2000; or Honeywell Alert Service Bulletin HG2030AD-34-A0009, dated March 9, 2000; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Honeywell, Publications, P.O. Box 21111, Mail Stop DV-10, Phoenix, Arizona 85036. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Chicago Aircraft Certification Office, 2350 East Devon Avenue, Room 323, Des Plaines, Illinois; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on May 3, 2000.

#### **FOR FURTHER INFORMATION CONTACT:**

Wess Rouse, Aerospace Engineer, Systems and Flight Test Branch, ACE-117C, FAA, Chicago Aircraft Certification Office, 2350 East Devon Avenue, Room 323, Des Plaines, Illinois 60018; telephone (847) 294-8113; fax (847) 294-7834.

Issued in Renton, Washington, on April 6, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**FOKKER SERVICE B.V.  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-28 FOKKER SERVICES B.V.:** Amendment 39-11684. Docket 2000-NM-95-AD. Supersedes AD 99-18-22, Amendment 39-11288.

Applicability: Model F27 series airplanes, certificated in any category, as listed in Fokker F27 Service Bulletin F27/61-40, Revision 1, dated August 1, 1997.

Compliance: Required as indicated, unless accomplished previously.

To ensure that flightcrews follow correct procedures that will maintain the high pressure cock (HPC) levers in a permanent lockout position to prevent consequent burnout of the engines during flight, accomplish the following:

**AFM Revision: Normal and Abnormal Procedures Sections**

(a) Within 6 months after October 8, 1999 (the effective date of AD 99-18-22, amendment 39-11288): Revise the Normal and Abnormal Procedures Sections, as applicable, of the FAA-approved Airplane Flight Manual (AFM) by incorporating Fokker F27 Service Bulletin F27/61-40, Revision 1, dated August 1, 1997; including Fokker F27 Manual Change Notification (MCNO) F27-001, dated June 30, 1997. [MCNO F27-001 specifies procedures for placing the HPC levers in a permanent lockout position (with the cruise lock withdrawal system disabled) during operation of the airplane.] This action may be accomplished by inserting a copy of MCNO F27-001 into the applicable sections of the AFM.

**AFM Revision: Limitations and Emergency Procedures Sections**

(b) Within 3 days after the effective date of this AD, revise the Limitations and Emergency Procedures Sections of the AFM by incorporating Fokker Manual Change Notification MCNO F27-008, dated March 1, 2000. This action may be accomplished by inserting a copy of MCNO F27-008 into the applicable sections of the AFM.

**Alternative Methods of Compliance**

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Operations Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 1: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

**Special Flight Permits**

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(e) The actions shall be done in accordance with Fokker F27 Service Bulletin F27/61-40, Revision 1, dated August 1, 1997, including Fokker F27 Manual Change Notification (MCNO) F27-001, dated June 30, 1997; and Fokker Manual Change Notification MCNO F27-008, dated March 1, 2000.

(1) The incorporation by reference of Fokker Manual Change Notification MCNO F27-008, dated March 1, 2000, is approved by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Fokker F27 Service Bulletin F27/61-40, Revision 1, dated August 1, 1997, including Fokker F27 Manual Change Notification (MCNO) F27-001, dated June 30, 1997, was approved previously by the Director of the Federal Register as of October 8, 1999 (64 FR 48280, September 3, 1999).

(3) Copies may be obtained from Fokker Services B.V., P.O. Box 231, 2150 AE Nieuw-Vennep, the Netherlands. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on April 18, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on April 6, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**AIRBUS INDUSTRIE  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-07-29 AIRBUS INDUSTRIE:** Amendment 39-11685. Docket 99-NM-07-AD. Supersedes AD 98-16-09, Amendment 39-10685.

Applicability: Model A300, A310, and A300-600 series airplanes; on which any fire shut-off valve (FSOV) having part number (P/N) B38LC50XX (where XX is 05, 06, 07, 08, 09, or 10) is installed; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct failure of the FSOV's to close, which could result in failure of the engine fire shut-off system, and consequent inability to extinguish an engine fire, accomplish the following:

**Repetitive Operational Tests**

(a) Within 600 flight hours after the effective date of this AD, perform an operational test of the 4 FSOV's on the airplane, in accordance with Airbus All Operator Telex (AOT) 29-22, dated November 24, 1997. If any FSOV fails the test, prior to further flight, replace the FSOV with a new or serviceable FSOV, in accordance with the AOT. Repeat the operational test thereafter at intervals not to exceed 600 flight hours.

**Spares**

(b) As of the effective date of this AD, no person shall install an FSOV, part number (P/N) B38LC50XX (where XX is 05, 06, 07, 08, 09, or 10), on any airplane, unless a successful operational test has been performed in accordance with the requirements of this AD.

**Alternative Methods of Compliance**

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

**Special Flight Permits**

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference**

(e) The actions shall be done in accordance with Airbus All Operator Telex (AOT) 29-22, dated November 24, 1997. This incorporation by reference was approved previously by the Director of the Federal as of September 4, 1998 (63 FR 40811, July 31, 1998). Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in French airworthiness directive 98-356-259(B), dated September 9, 1998.

(f) This amendment becomes effective on May 19, 2000.

**FOR FURTHER INFORMATION CONTACT:**

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on April 7, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**ROLLS-ROYCE PLC  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-08-01 Rolls-Royce plc:** Amendment 39-11687. Docket 99-NE-61-AD.

*Applicability:* Rolls-Royce plc (R-R) Tay 650-15 series turbofan engines, with stage 1 high pressure turbine (HPT) disks, part numbers (P/Ns) JR32013 and JR33838, and stage 1 low pressure turbine (LPT) disks, P/N JR32318A. These engines are installed on but not limited to Fokker F.28 Mark 0100 (F100) series aircraft.

**Note 1:** This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

*Compliance:* Required as indicated, unless accomplished previously.

To prevent crack initiation and propagation leading to turbine disk failure, which could result in an uncontained engine failure and damage to the aircraft, accomplish the following:

**Flight Plan Profile C**

(a) Remove from service stage 1 HPT disks, P/Ns JR32013 and JR33838, and stage 1 LPT disks, P/N JR32318A, operated under flight plan profile C, as defined in the R-R Tay Engine Manual, 70-01-10, pages 1-10, prior to accumulating 18,000 cycles-since-new (CSN), and replace with serviceable parts.

**Flight Plan Profile D**

(b) Remove from service stage 1 HPT disks, P/Ns JR32013 and JR33838, and stage 1 LPT disks, P/N JR32318A, operated under flight plan profile D, as defined in the R-R Tay Engine Manual, 70-01-10, pages 1-10, prior to accumulating 14,250 CSN, and replace with serviceable parts.

**Alternative Methods of Compliance**

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators shall submit their request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

**Note 2:** Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

**Special Flight Permits**

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference Material**

(e) The actions of this AD shall be done in accordance with R-R Service Bulletin TAY-72-1479, dated July 20, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Rolls-Royce plc, P.O. Box 31, Derby, DE24 8BJ, UK, telephone 011-44-1332-242424. Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

**Effective Date of This AD**

(f) This amendment becomes effective on June 19, 2000.

**FOR FURTHER INFORMATION CONTACT:**

James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone 781-238-7176, fax 781-238-7199.

Issued in Burlington, Massachusetts, on April 7, 2000.

David A. Downey, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service

**MCDONNELL DOUGLAS  
AIRWORTHINESS DIRECTIVE  
LARGE AIRCRAFT**

**2000-08-03 MCDONNELL DOUGLAS:** Amendment 39-11689. Docket 2000-NM-97-AD. Supersedes AD 2000-05-01, Amendment 39-11610.

Applicability: Model MD-11 series airplanes, certificated in any category, having the serial numbers listed below.

**Group 1 Airplanes:**

48565	48566	48533	48549	48470	48406
48504	48602	48603	48571	48439	48605
48572	48471	48573	48600	48601	48633
48513	48574	48575	48542	48543	48576
48415	48631	48544	48632	48577	48545
48578	48546	48743	48744	48747	48748
48745	48746	48749	48579	48766	48768
48767	48769	48754	48623	48770	48753
48773	48774	48755	48758	48775-48779 inclusive	
48624	48756	48780	48532		

**Group 2 Airplanes:**

48555	48556	48581	48630	48557	48539
48558	48559	48616	48560	48617	48618
48561	48629	48562	48563	48757	48540
48564	48634	48541	48798	48781-48792 inclusive	
48794	48799	48801	48800	48802-48806 inclusive	

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent overheating of the electrical pins inside the cargo control units (CCU) and subsequent release of hot gases and flames, which could result in smoke and fire in the cargo compartment, accomplish the following:

**RESTATEMENT OF REQUIREMENTS OF AD 2000-05-01:**

**Deactivation**

(a) For Group 1 airplanes having serial numbers other than that identified in paragraph (c) of this AD: Within 15 days after March 20, 2000 (the effective date of AD 2000-05-01, amendment 39-11610), deactivate the forward and center CCU's in accordance with the following procedures:

(1) Remove the access panel to the forward cargo compartment CCU circuit breaker panel located at fuselage station 1009.300 (right side looking aft). Pull and collar the following circuit breakers:

B1-506	B1-489	B1-488	B1-487	B1-486
B1-485	B1-480	B1-481	B1-498	B1-482
B1-500	B1-495	B1-499	B1-490	

(2) Remove the access panel to the center cargo compartment CCU circuit breaker panel located at fuselage station 1701.000 (right side looking aft). Pull and collar the following circuit breakers:

B1-552	B1-762	B1-761	B1-760	B1-759
B1-758	B1-518	B1-519	B1-751	B1-520
B1-753	B1-764	B1-752	B1-763	

2000-08-03

(b) For Group 2 airplanes having serial numbers other than that identified in paragraph (c) of this AD: Within 15 days after March 20, 2000, deactivate the forward and center CCU's in accordance with the following procedures:

(1) Remove the access panel to the forward cargo compartment CCU circuit breaker panel located at fuselage station 1009.300 (right side looking aft). Pull and collar the following circuit breakers:

B1-506	B1-489	B1-488	B1-487	B1-486
B1-485	B1-480	B1-481	B1-498	B1-482
B1-500	B1-495	B1-499	B1-490	

(2) Remove the access panel to the center cargo compartment CCU circuit breaker panel located at fuselage station 1701.000 (right side looking aft). Pull and collar the following circuit breakers:

B1-552	B1-762	B1-761	B1-760	B1-759
B1-758	B1-518	B1-519	B1-751	B1-520
B1-753	B1-764	B1-752		

#### **NEW REQUIREMENTS OF THIS AD:**

(c) For Group 1 airplane, serial number 48769, and for Group 2 airplane, serial number 48563: Within 15 days after the effective date of this AD, accomplish the actions specified in either paragraph (a) or (b) of this AD, as applicable.

#### **Alternative Methods of Compliance**

(d) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 2000-05-01, amendment 39-11610, are approved as alternative methods of compliance with paragraph (a) or (b) of this AD, as applicable.

#### **Special Flight Permits**

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(f) This amendment becomes effective on May 5, 2000.

#### **FOR FURTHER INFORMATION CONTACT:**

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Issued in Renton, Washington, on April 12, 2000.

Donald L. Riggins, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.